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PHOTO - ERA

The American Journal of Photography

AN ILLUSTRATED MONTHLY

OF

PHOTOGRAPHY AND ALLIED ARTS

Volume XXVII

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WILFRED A. FRENCH

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WHEN FOG IS ON
WILLIAM NORRIE



PHOTO-ERA

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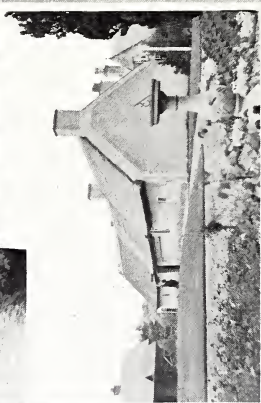
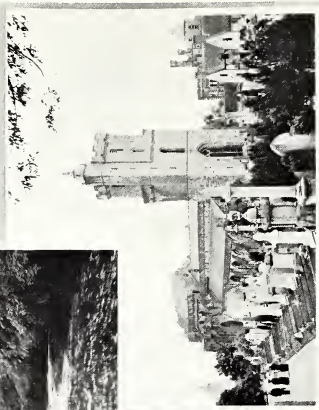
No. 1

A Photographic Tour through Scotland

JAMES PARIS

IT had ever been my wish since boyhood to visit "Bonnie Scotland," of which I had heard so much from my father fifty or sixty years ago; but it was not till last summer that the wish was fulfilled. Of course I had to take a camera along, and so I now enjoy the views I made. I took a good, solid 4 x 5 long-focus camera, six-inch focus rapid rectilinear lens, back lens ten-inch focus. I also had a wide-angle lens of four-inch focus which fitted the same flange. The camera had a revolving back, also swing. I was foolish enough to take a good solid tripod along, instead of one of those light affairs in using which you have to hold your breath while making an exposure, for fear of moving the camera. I do not care to "snapshoot" everything; I like to see what I have on the ground-glass before exposing. Of course it is a lot of trouble to carry (you generally have enough else) and set up and focus, or move from place to place to get the best view, but there is a good deal of satisfaction in getting sixteen dozen good negatives out of eighteen! The poor ones were snapshots; I would have got better ones had I had a better lens. I decided to use film-pack, as being handier than plates, and I was advised by a demonstrator to pull them out *straight and slowly*, and there would be no scratches. I did so, and there is not a scratch on one of the films. I also took a film-pack-tank and developer along, but did not find a place where I could use them during the trip. I had some fine work done in Edinburgh, as I had heard that there was a good deal of difference in the actinic value of the light; but I did not notice any difference from home (Wisconsin). Nearly all of my work was done at F 16 on $\frac{1}{2}$ second and was about right. I did not take any particular pains with the packs; they were in my trunk in the stateroom, not even done up, going or coming. We left Montreal (there were five in our party) at 3.20 A.M. Saturday, June 12, 1909, and arrived in Quebec about noon. We had expected to make some

exposures on the way down the St. Lawrence, but it was cloudy all the time. We stopped in mid-stream at Quebec and could not make any exposures on the city or the Citadel. Just after we left Quebec, the sun came out (as usual); but we were too far away. The next day, Sunday, we were too far away from land to do any photographing, so we went to church in the First Cabin. Barring three days and nights in a fog off the south coast of Newfoundland, and barely escaping being run into by a large steamer, the trip was fine. We had nice bright sunshine, but cold winds, and we were happy when we came at last in sight of "Auld Scotia." We anticipated a fine trip up the mighty Clyde, with its lovely scenery and its great ship-building yards; but, as Bobbie Burns says, "The best-laid plans of mice and men gang aft aglae"; it started to rain just as we got into the river, and kept it up more or less (more, rather than less) during the ten days we were in Glasgow, so there was not much chance for photographing. We had part of a day's sunshine in Kelvingrove Park. In the park are located the Art Gallery and the famous Glasgow University. The photograph of the Art Gallery was made from one of the walks, where we had lunch. Owing to the haze that was always present, it was impossible to get any detail in the distance, but in this case it was a help: time $\frac{1}{2}$ second, stop F/32. The one of the arches at the university was taken while waiting for a shower to pass over: time 30 seconds, F/32. I must say that it was a pleasure to be able to set up a tripod in any of the parks, in fact, most any place in Scotland, without being told that you could not use a tripod without a permit, as in and around London. It was a pleasure to be told, whenever I asked if I could use a tripod, "Certainly, but don't get in anybody's way in the conservatory or the parks." This I was careful not to do. While in Glasgow we made a trip to Ayr, the Land of Bobbie Burns. We left on the 7.25 A.M. train and arrived there about 9. As Baedeker did not say



anything about the tram-cars' running to Alloway, we hired a cab to take us there. You may imagine our feelings when we followed the track all the way out there and when we had just started to look around, Cabby said, "Time is up." He was told to skip along, and we would go back when we got ready. The day was fine, no sun, but the light was very strong, and no heavy shadows, the air very still, and it was an ideal day for photography and sightseeing. We took in almost everything of interest from Burns's birthplace to Alloway's Auld Kirk, where Tam O'Shanter got into the mix-up with the Deil and a' the witches. From there we went down the hill and along the banks of "Bonnie Doon" to the Auld Brig, where Tam's mare lost her tail. The monument and gardens are near there and are very fine, but it is hard to get a good view of the monument. The gate-keeper said he knew that we were Americans, as none of their people got up so early. Some very pretty views can be made along the river-bank above the Auld Brig near the old mill. Owing to the haze, only near views could be made, and we found the time altogether too short to see all we wanted to and had to pack up and get back to Glasgow, where we arrived tired and hungry. After a day's rest we took the trip through the Trossachs. We were again favored with a lovely day, but no sun. Starting from Glasgow, it is possible to make the round of the Lochs in a day; but it is not advisable, as it is the most famous region in all Scotland for its historic interest and scenic beauty. Leaving Glasgow, the road runs along the banks of the Clyde. The principal point of interest is Dumbarton Rock with its castle, rising 280 feet on a point of land where the River Leven joins the Clyde. From here it runs through the beautiful valley of the Leven to Balloch, on the south end of Loch Lomond, where we took the steamer for a trip on the most beautiful of all Scottish Lochs, made so by the numerous wooded islands among which the steamer threads its way. Here also was that ever-present bluish haze prevailing over the landscape, which made it difficult to get clear photographs, but which added greatly to the beauty of the scene, and I doubt if sunshine would have improved it. The whole country, here and on Loch Katrine, is beautifully described in Sir Walter Scott's "Lady of the Lake." Those who wish to climb Ben Lomond leave the boat at Rowardennan. From this place the Loch narrows, and we had a better view of "The Bonnie banks of Loch Lomond." At Inversnaid, according to Baedeker, the coaches were in waiting to take us to Loch Katrine. The road is over a wild,

rocky country, passing Loch Arklet and descending the hills for half a mile to Stronachlachar Hotel. Taking the boat here, we were somewhat disappointed in the beauty of the Loch, but as we sailed towards the east end, we seemed to be going right into the heart of the hills — Ben A'an on the left, Ben Venue on the right, and the round dome of Ben Ledi ahead. As the steamer passed to the left of Ellen's Isle, it was easy to picture the scene in which Fitz James approached the shore

"But scarce again his horn he wound,
When lo! forth starting at the sound
From underneath an aged oak
That slanted from the islet rock,
A damsel guider of its way,
A little skiff shot to the bay."

The silver strand is submerged now, the building of a dam for the Glasgow water-supply having raised the water; but the shores are still beautiful. The little pier, clinging to the hillside, makes a charming picture. From here, the coaches are taken for the ride through the Trossachs (meaning bristling country), and I doubt whether there is another four miles in any country which can surpass the ride from Ellen's Isle to the Brig of Turk. The smooth macadamized road runs through a heavily-wooded glen, with lovely views at every turn, and where birch, hazel, oak, pine, and fern-laden ground keep the spot sequestered as on the day when James Fitz James saw his gallant gray drop and die in its solitude. Two miles from the Loch is the Trossachs Hotel, beautifully situated on the hillside overlooking Loch Achray, with a grand view of Ben Venue. We stayed overnight at the hotel, and in the morning were reminded of the story of the Englishman who was bickering with the Highland hotel-keeper regarding the bill; the Englishman said he could live cheaper in the best hotel in London, to which the landlord replied, "Oh nea doot, sir, nea doot: but do ye no ken the reason?" "No, not a bit of it," replied the stranger. "Weel then," replied the host, "as ye seem to be a sensible callant, I'll tell ye: there's three hundred and sixty-five days in the Lonnon hotel-mon's calendar, but we have only three months in ours! Do ye understand me noo, frien'? We maun mak' hay when the sun shines in the Heilans, for its unco seldom he dos't!" I can't understand why they did not build the hotel on the shore of Loch Katrine, where a person could have some time to view the beauties of the Loch. Leaving the hotel, the road keeps along the edge of Loch Achray on one side, and the same fern-laden woods on the other, with here and there glimpses of pala-



tial residences and grounds, rhododendrons everywhere, laden with many-colored blossoms, till the Brig of Turk is reached, reminding one of "The Chase," in "The Lady of the Lake."

"And ere the Brig of Turk was won,
The foremost horseman rode alone."

The country around here is a favorite haunt of the Glasgow School of Artists during the summer. Shortly after leaving the Brig, we passed an auld Highlandman seated on a stone, playing a wild Scottish air on the bagpipes, and a wee bairn holding out his bonnet for the pennies. The road here passes the country where was fought the duel between Fitz James and Black Roderick, and along in view of Loch Vennachar, on the right, Ben Ledi (The Hill of God of the ancient pagan-faith) rises in the blue haze on its summit on Beltime (Baal-fire) Eve. Every summer the sacred fire was received from heaven, and from that fire the extinguished hearths of the country were rekindled for another year. Very soon the road descends to the left bank of the Levy and shortly reaches Calander, beautifully situated in a lovely valley on the banks of the River Leith. Fine views can be had along the banks of the river, and of the old bridge and Ben Ledi in the distance. From here we took the train for Edinburgh, where we spent two delightful weeks, in rooms next door to those to which we had been recommended. We started at the castle where grand views of the city can be had, but we were not allowed to take our cameras inside the walls; we had to be contented with sightseeing and the buying of postcards. There is little now within the walls dating prior to the 15th century, except St. Margaret's Chapel and Queen Mary's rooms, built for her in 1565. In one of the inner rooms was born her son, afterwards James V of Scotland and I of England. It is said that the infant was lowered in a basket from the window in the room, to the safe custody of her friends. In the Banquet-Hall, with its varied history of the noted banquets of Charles I and of Oliver Cromwell, is a fine array of old armor which tastefully adorns the walls. Here also is the gun-carriage on which the remains of the lamented Queen Victoria were borne from Osborne to Cowes in 1901. The Scottish crown-jewels are also to be seen in one of the rooms near Mary's room. Before leaving the castle, one must not forget to go to the Argyll Battery which overlooks the Princes Street Gardens and the north part of the city, and see the wee little cemetery for dogs and cats, pets of the garrison, with its little walks, headstones, and lovely flowers. It is near the Argyll Prison, outside the castle walls. From the Esplanade

is a fine view of part of the old town to the south, and to the north are the Gardens, the Art-Gallery, Calton Hill, and Sir Walter Scott's Monument. Beginning at the entrance to the Esplanade is what is known as the Royal Mile, from the castle to Holyrood Palace. It is usually called High Street, but has several names, such as Castle Hill, Lawn-Market, High Street, Netherboro and Canongate. A hand-camera can be used here, as the street is narrow, and there are too many carts and people in the way to use a tripod, although I used one in making the picture of the old "Mercat Cross," and that of St. Giles Cathedral, from under the covered porch of the Parliament Square buildings, during a rain. Near the statue of Charles II is a small flat stone marked I. K. 1572, supposed to be the burial-place of John Knox. A great many very interesting places in the history of old Edinburgh are on this street, which was the fashionable one in the old town: John Knox's House, the Tron Church, Canongate, Tolbooth, White Horse Close, and many others. A great many fine and interesting views may be made at Holyrood Palace (outside, I mean), as tourists are not allowed in the grounds. No good picture can be had of the Abbey. In the Palace are many interesting relics of the beautiful Mary, Queen of Scots. The fountain in the center of the Palace Yard, was erected by the late Prince Albert, and is a facsimile of the ruined one in the quadrangle of the Palace. Entering the gateway, the State apartments are seen on the right, but they are closed to the public. On the left is a stairway leading to a picture-gallery containing over two hundred imaginary portraits of the Scottish kings. Here also are seen Lord Darnley's room, Queen Mary's apartments, her audience-chamber and bedroom, with its ancient and mouldering finery. From this room a door leads to the private supper-room which was the scene of Holyrood's great tragedy, when the Italian secretary, Rizzio, was murdered by Darnley and his fellow-conspirators. The spot is still shown where he fell. The Chapel Royal was erected in 1128 by David I in gratitude for his deliverance from a fierce stag, by the mysterious interposition of a cross. As it was undergoing the process of restoration, we did not have much chance to inspect the burial-places of the Scottish kings. A very interesting day can be spent in the historic town of Stirling, with its old castles, the first one dating A.D. 81. There are no restrictions against photographing here, but rain (as usual) prevented the taking of many views. On our return to Edinburgh we bade adieu the next day to Bonnie Scotland, and hied away to Merrie England.



Marine-Studies

WILLIAM S. DAVIS



SEASHORE- and harbor-scenes offer many splendid chances for beautiful pictorial compositions; yet, considering the number of photographs taken, only a small part are successful marine-pictures. This state of things is certainly not due to lack of good material; for natural scenery of great charm can be

found along our coast, and in every port, large or small, water-craft can be secured.

Amateurs residing in seaport-cities might well spend a vacation sailing back and forth upon the longer ferry-lines, making exposures upon the shipping and atmospheric effects, or looking for advantageous standpoints along the water-front from which to work. Those who live on or visit the more isolated portions of the coast should work the rich mines of material which await anyone who can extract the pictorial gems of rock- and surf-views.

That disappointments should lie in wait for the unwary is to be expected, and even the more experienced have their failures; but those who really love such scenes are well repaid for the trouble of obtaining them by the good results. Having learned by practice some of the peculiar difficulties which must be overcome, I trust the suggestions offered here will be found useful to those interested.

First, about apparatus. Any camera will serve the purpose up to a certain point, but as it is sometimes necessary in marine-work to take a subject from a distance, a long-focus style of solid construction is most generally useful. A 5×7 is the largest size which can be used to advantage and 4×5 is more convenient. For use on very stormy days, or when working from a small boat, a small camera (say "quarter-plate" size, of the box type) is handier than any other. With regard to the optical equipment, a good rectilinear lens working at $F/8$ is perfectly satisfactory, and a single achromatic is not by any means to be despised; in fact such a one as the back combination of the rectilinear is sometimes of great value. From 7- to 10-inch focus (the latter for choice) is best

on a 4×5 camera. I cannot advise any choice among the shutters now on the market, for mine are all of a different type; but those with valves and other working-parts enclosed would seem to be most suitable. Some kind of lens-hood is needed as a protection against sun and spray, the simplest form being a blackened cardboard tube which can be slipped over the lens-mount and as long as can be used without cutting off any light at the margins of the plate. A ray-filter of medium depth is of great value in certain cases, which will be mentioned later. The outfit should not be considered complete without a good, stiff tripod.

Backed or double-coated color-sensitive plates of medium or fast grades give the best results.

Because of the strong light frequently found at the seashore, one should make sure the camera is light-tight, particularly around the front-board and bellows, since a very little stray light inside will cause flat, muddy negatives, a fault which is sometimes wrongly laid to over-exposure. As an extra precaution, it is well to wrap a rubber focusing-cloth around the instrument (tying it in position with tapes) and also to take special care in removing or inserting the slides in the plate-holders.

A word here about the care of an outfit may not be amiss, as salt spray, if allowed to dry on, will quickly eat into leather and brass; so it is a good plan to rub all the metal parts before going out on a rough day with a rag slightly moistened with sperm oil or "3 in 1"; and after the day's work every exposed portion of the outfit should be wiped off with a cloth wrung out of fresh water, and then allowed to dry thoroughly.

Now for the work, which for convenience may be classified according to the treatment demanded.

Shore-Scenes and Harbor-Views

Many fine pictures can be made on quiet summer days; such a subject, for example, as an old wharf with a few boats reflected in the still water being particularly attractive, but the light should be softened by clouds or a hazy atmosphere for the best results. I recall with pleasure a trip to Noank, a picturesque small port on the Connecticut shore, when the weather was ideal for such work, the only regret being lack of time to accomplish more. The August sun was slightly diffused by masses of delicate,



large cumulus clouds, which were reflected, together with the warehouses and boats, in water just stirred sufficiently to break the sharpness of the reflections. In such conditions an exposure of $\frac{1}{30}$ to $\frac{1}{60}$ second can be given on a rapid plate, with the lens at F/11. If the picture is taken on the water or on an open shore, a still quicker exposure might be sufficient; but notwithstanding all that has been said about the great power of the light along-shore, it is quite possible to *under-expose* when there are dark objects of any kind near at hand.

On account of the great contrast between dark shadows in the foreground and brilliantly illuminated water, it is of course difficult to secure good values in the lighter passages and obtain clear shadows at the same time; but forcing the development of a negative timed for the lights only in an effort to bring out shadow-detail will result only in blocking up the former into an unprintably opaque mass; so the only way is to expose for the shadows and develop for the highlights, which will take care of themselves on non-halation plates.

When the subject will permit of the extra exposure's being given, a ray-filter is valuable, as when white sails in sunshine come against a blue sky; and on foggy or misty days to preserve more fully the quality of the atmosphere.

With the possible exception of surf, the most striking marine-effects occur near sunset and during the afterglow, indescribably delicate hues and tones enveloping the scene in an atmos-

phere unknown in full daylight. When the charm is due to color alone, the camerist cannot hope for satisfactory results; but often while the sun in the west is flooding the waters with a golden pathway of light an opportunity is offered for a successful picture. Care should be taken, though, to have the sun partly hidden by clouds, unless it is very near the horizon.

Exposures on sunsets average about $\frac{1}{40}$ to $\frac{1}{60}$ second, stop F/11 and fast plates, for sky and water alone, between April and November. During the winter months $\frac{1}{25}$ second would be better.

More time is required if any detail is wanted in dark rocks or other objects in the foreground; and in such cases a ray-filter will be a great help, $\frac{1}{4}$ up to several seconds being given, according to local conditions and time of year.

Night-Scenes

A novel branch of marine photography is working along-shore by moonlight, and with care and patience very interesting results may be secured, either at twilight, with the moon just rising, or later in the evening when the water catches the silver gleam of the moonlight.

Of course the length of exposure necessary, which runs sometimes to 30 minutes with the lens wide open, makes it impossible to introduce moving vessels or breaking waves, the water always appearing calm in such pictures.

If the moon is wanted in the picture, it can be included without showing its motion by wait-



EVENING GLOW
FLYING SPRAY
WILLIAM S. DAVIS





ing until it is high enough to be out of the field of view; then, after making the exposure on the foreground and water, tilting the camera until the moon comes to the desired position on the ground-glass and exposing again for a few seconds. Another way is to take the moon on a separate plate and lay this negative back of the first when printing.

Surf-Studies

When the foaming waves come rushing in, during or after a gale, and break into masses of flying spray against the rocks, it seems as though the sight must stimulate anyone of artistic feeling to exert himself to render the majestic beauty of the wind-lashed sea, which, like the sky, one may watch for years, always seeing something different; but, as is ever the way, the grander or more beautiful the source of inspiration, the more elusive it becomes; and therefore difficult to reproduce in visible form. Such being the case, about all the information I can give is purely technical.

There appears to be a rhythmical variation in the size of incoming waves, several smaller ones usually being succeeded by two or three large fellows; so one should watch for these; and, in the case of dashing spray, release the shutter while the foam is still rising to secure the maximum effect, because allowance must be made for even the fraction of a second needed for the shutter to get in motion. With such subjects, failure to get the desired effect (due to error in

calculation) must sometimes be expected, and experience is the only thing which will help prevent it.

On account of allowing greater freedom in watching the breakers, I prefer when possible, to mount the camera on a tripod, from the head of which is suspended a weight, such as the camera-case or a cloth bag filled with stones, to prevent the outfit's sailing off on a cruise of its own along the shore.

If the instrument is used in the hand, a direct-vision finder will be found more useful than a reflecting one.

In summer the best results will be obtained before 9 A.M. or after 3 P.M.; for the sun is then low enough to give the long shadows which are so essential in a composition.

A side-lighting is generally best, unless one is looking down upon the waves, when very effective pictures can be taken against the light, with the sunshine glinting upon the crests of the rollers.

Dashing spray needs clouds or a gray sky to bring out its beauty in a photograph.

As a result of many trials, I think the exposure upon breaking waves should not be shorter than $\frac{1}{30}$ second, except in rare cases. This is quick enough to prevent a woolly look, yet it allows just sufficient wave-movement while the lens is open to give to the spray the feeling of motion which is essential to overcome that frozen appearance so fatal to pictorial effect. The exposure being timed to suit the wave-



motion, it is evident that its correctness for the actinic strength of the light must be regulated by changing the size of the stop or by using plates of different speeds. Perhaps the best way is to employ plates of medium speed in summer and fast ones later in the season, altering the size of the lens-opening according to the time of day.

Photographing, and Working From, Water-Craft

In taking pictures afloat, allowance must be made for motion of the camera and the extra strength of the light, which is increased by upward reflection from the water. As a rule, not more than half as much exposure is required to secure full-time as is the case on shore.

Generally, $\frac{1}{60}$ second is fast enough to overcome blurring due to motion if only the camera or the subject is moving, or if both are traveling in the same direction; but when they are going in opposite directions it would be safer to set the shutter for $\frac{1}{100}$ second, particularly if the subject is very near or is moving rapidly.

When one is doing work on board a steamer, another point to be considered is the vibration of the engines, which in some cases is quite troublesome. For this reason it is well to choose some place on deck which is not directly over the machinery.

If the vessel from which the work is done should roll or pitch to any extent, the shutter is best snapped during a reversal of the motion, *i.e.*, while at the highest or lowest point.

After all care has been taken during pre-

vious stages of the work, the visible result will be greatly altered by the chemical treatment of the exposed plate. Success does not depend upon any special developer (for the proportion of ingredients in the various standard formulas can be relied on) but its strength and the time of development do have a decided effect upon the character of the negative. With correct exposure, the solution may be strong enough to produce a clear, soft negative in 4 or 5 minutes, when used at a temperature of 60 to 65° Fahr., unless the contrast is very great in the original (as is generally the case with surf-and-rock compositions), when it might be well to dilute with an equal amount of water and develop more slowly, stopping when the highlights are just dense enough to print well with the halftones of the picture. Should the deeper shadows then appear too dark in the print, the thin portions of the negative can be strengthened by any of the ordinary methods, such as staining with yellow dye or working on the back of the plate. If the prints are made upon bromide paper, over-dark portions can be reduced to a certain extent by applying the hypo and ferri-cyanide reducer locally with a camel's hair pencil or a tuft of absorbent cotton. This is best accomplished by laying the print on a piece of glass and blotting off surplus moisture to prevent the reducer's spreading.

For broad effects or large-sized work the gum-process is very fine when skilfully handled and possesses the advantage that the deepest tones can be perfectly regulated by the amount of pigment used in the coating-mixture.



THE MAID OF THE POOL
WILLIAM NORRIE



ON A SUMMER SEA
WILLIAM NORRIE

Diamidophenol as a Developer in Tropical Countries

A. and L. LUMIÈRE and A. SEYEWETZ

THE difficulties of obtaining the developing-solution at a proper low temperature when working in tropical countries have led to many experiments in the direction of providing developers capable of being used at a high temperature without causing alteration or softening of the gelatine film, and without leading to fogging of the plates.

Among the various means suggested hitherto for this purpose, the addition of substances capable of hardening the gelatine, such as the salts of chromium or aluminum, has not been capable of adoption even with developers in which alkali is not used, in consequence of the fairly rapid precipitation of chromium or aluminum hydroxide. This latter is immediately precipitated when a free alkali forms a constituent of the developer, such action destroying the effect of the hardening-body.

M. Bunel, in a recent paper, has advised the addition to the metol-hydroquinone developer of alkaline sulphates. These do not render the gelatine insoluble, but they prevent it from swelling in the warm developing-solution.

M. Bunel has particularly specified the use of potassium sulphate and borax in a metol-hydroquinone developer made up without bromide, and using acetone in place of the alkali.

We have found that this developer serves well without producing softening of the film at a temperature of 95° to 104° F., but it acts much too rapidly at this temperature, and likewise leads to considerable fog. Moreover, the use of acetone appears to us to be unadvisable at a temperature so high as 100° to 104° F., on account of the volatile nature of this material.

In the present series of experiments we have endeavored to ascertain the best developing-formula, both with and without alkali, in order to be able to work at temperatures of from 100° to 104° F. for a normal time of development and while obtaining a good result.

Diamidophenol

We first subjected this developer to a systematic examination, using with it substances which render the gelatine insoluble, as well as those which prevent its melting, or softening, in warm water, without actually rendering it insoluble. The first class of substances possess the drawback already mentioned — namely, of precipitating the hydroxide of chromium or aluminum — and thus, in seeking to obtain a

working-formula, we have succeeded only with the second class of substances, belonging to which we have noticed not only the alkaline sulphates, but also the sulphites. With these substances used in sufficient quantity, the gelatine film remains unaffected, even at a temperature of 113° Fahrenheit.

In order to avoid introducing a new substance into the developer, we first attempted to employ sulphite of soda in preference to the alkaline sulphates, but when using diamidophenol we were unable to introduce the quantity of sulphite necessary for the prevention of softening of the gelatine without the plates' suffering from considerable fog, even when a large excess of bromide was employed.

On the other hand, the alkaline sulphates, and particularly ammonium sulphate, have given us good results.

In the case of diamidophenol developer there is no reason to fear the dichroic fog which is mentioned by Bunel as liable to occur when ammonium sulphate is used with an alkaline developer, for this fog is due to the presence of free ammonia which is not displaced by the sulphite of the developer.

In order to obtain a negative free from fog at a temperature of from 100° to 104° F., it is necessary to add to the bath a considerable quantity of bromide.

The following is the formula for the developer which has given us the best results:—

Diamidophenol.....	5 gms.	44 grs.
Soda sulphite (anhydrous) ..	30 gms.	260 grs.
Ammonium sulphate cryst ..	250 gms.	5 ozs.
Potass. bromide.....	3 gms.	27 grs.
Water.....	1,000 ccs.	20 ozs.

In place of the 250 gms. of ammonium sulphate, 150 (3 ozs.) of anhydrous soda sulphate may be used.

This developer, used at a temperature of 100° to 104° F., gives excellent negatives in about three minutes' time of development.

Metoquinone

As regards the use of metoquinone, one does not find the same drawbacks as with diamidophenol in respect to the use of an excess of sulphite. We have been able to work out a good developing-formula for metoquinone, containing sufficient excess of sulphite to keep the gelatine film from softening at 104° F. We have thus succeeded in obtaining good negatives, free from

dichroic fog, with a time of development of about three minutes, a result which we have not been able to reach by using alkaline sulphates, either in the presence or absence of alkalies. The following is the formula of the metoquinone developer:—

Metoquinone	5 gms.	44 grs.
Soda sulphite (anhydrous)	200 gms.	4 ozs.
Potass. bromide	2.5 gms.	22 grs.
Water	1,000 ccs.	20 ozs.

Metol-Hydroquinone

Taking metol-hydroquinone as a type of an alkaline developer, we were able to work out with this latter, just as with metoquinone, a formula containing a sufficient excess of sulphite to prevent melting of the gelatine film at 104° F.

The formula allows of the production of negatives comparable with those obtained with metoquinone within a time of development of about three minutes. We were unsuccessful in obtaining so good a result by substituting sulphates for the soda sulphite. The formula which gave the best results was the following:—

Metol	1.5 gms.	13 grs.
Hydroquinone	1.5 gms.	13 grs.
Soda sulphite (anhydrous)	200 gms.	4 ozs.
Soda carbonate (anhydrous)	10 gms.	88 grs.
Potass. bromide	2.5 gms.	22 grs.
Water	1,000 ccs.	20 ozs.

Pyro

Within our experiments, pyrogallie acid can be employed as developer in tropical countries

without any addition beyond that of sulphite or sulphate. In fact, it is easy, by a slight modification of the customary formulæ, to prepare a developer which gives only a slight fog at a temperature of 104° F. The following is the formula of the bath which allows of this result's being produced:—

Pyro	10 gms.	88 grs.
Soda sulphite (anhydrous)	25 gms.	½ oz.
Soda carbonate (anhydrous)	50 gms.	1 oz.
Potass. bromide, 10 p.c. solution	30 ccs.	5 drams.
Water	1,000 ccs.	20 ozs.

This developer will not keep very long, and rapidly discolours during development. For a formula which can be kept at hand for use the following two solutions should be used:—

A.—Pyro	30 gms.	260 grs.
Soda bisulphite liquor	10 ccs.	1½ drams.
Water	1,000 ccs.	20 ozs.
B.—Soda carbonate (anhydrous)	75 gms.	1½ ozs.
Soda sulphite (anhydrous)	37 gms.	160 grs.
Potass. bromide, 10 p.c. solution	45 ccs.	7½ drams.
Water	1,000 ccs.	20 ozs.

To prepare the developer for use, one part of A is mixed with two parts of B.

Summing up the foregoing experiments, the diamidophenol formula is the only one which gives a developer yielding negatives free from fog at a temperature of 104° F. This developer, therefore, should be employed by preference whenever great keeping-power is not essential.





AN EGYPTIAN FERRY
HENRY A. PEABODY
THE CONLEY SEA
WILLIAM NORRIE



Fine Focusing

F. DUNDAS TODD

NOT being a follower at any time of the fuzzy school, I have naturally seen to it that my cameras — I have owned as many as fourteen at once — were all in good workable condition. About the first item that I investigate when a new instrument comes into my hands is the question of correspondence of register between the focusing-screen and the plates in the holders, for I have learned by experience that they not infrequently fail to agree. With lenses of six-inch focal-length and less, there is considerable leeway; but with increase beyond six inches more accuracy is demanded.

Let us digress here a moment. Even a novice in photography soon learns the fact, though probably he cannot express the idea in words, that there is such a thing as depth of field, that is to say the possibility of getting a sharp image on the plate of objects that are at varying distances from the lens, but he may be photographing for years before he realizes there is also something like unto the first which is known as depth of focus; that is, the variation of distance between the groundglass and the lens, inside of which range definition is satisfactory. It is with the latter, depth of focus, that I have been particularly concerned for the past three years. The shorter the focal-length of the lens, the greater the depth of focus; for example, using an ordinary 4 x 5 camera with a lens of six-inch focal-length, supposing we are exposing on an object one hundred feet away, then if we set the pointer at fifty on the focusing-scale, the image will be sharp enough to the eye. The variation in the depth of focus here is one-sixteenth of an inch. Now suppose you are using a lens of, say, sixty-inch focal-length — don't smile at the idea, because I have been making exposures with longer focal-lengths than that — then, other things being equal (the other things consisting particularly of the size of the stop) your depth of focus has vanished almost into nothingness. Near enough won't do; you must get it just so; and this fact involved me in a chase which lasted for many moons. Since some reader may be interested in the same problem of fine focusing, I will tell the story so as to save him time.

In the first place, I tackled the problem of correspondence of register between ground-glass and plate. On the 6½ x 8½ camera which I am using for telephoto work I have fitted backs for 5 x 7 and 4 x 5 plates. The whole-plate holders are of English make and book-form in

style; the others are of the ordinary American solid-form pattern. In the former, the plates are pressed up against the rabbets by means of springs, hence are always at the same distance from the front of the holder; in the solid form there are no springs, hence the distance may vary about a sixteenth of an inch. This is really of little moment with short-focus lenses, but is simply intolerable with telephoto combinations.

My first task was to true up focusing-screens and plate-holders. For testing, there are many mechanical devices, all of which I have used at one time or another; though curiously enough I managed to forget all about the very best one until I had tried all the others; but I will even matters in a way by mentioning it alone here. Get a piece of perfectly straight wood about an inch square in cross-section, and a little longer than twice the length of the holder. Through the center drive a wood-screw until it projects about a quarter of an inch. Then take your holder and put a plate in it, first of all dropping in a narrow strip of cardboard from a plate-box at each end so as to force the glass against the rabbet-edge. Now set your testing-device across the face of the holder and adjust the screw until it just touches the face of the plate. Next apply the test to the back of the camera. If the ground-glass face of the focusing-screen and the face of the plate agree, all is lovely; as a matter of fact, this is a condition I have yet to meet. A difference of one-sixteenth of an inch is common. The worst case I ever met was in a large portrait-camera in which the discrepancy amounted to almost three-eighths of an inch. Some days ago I tested for a young professional photographer a camera which had been in use for many years and found a difference of three thirty-seconds. The former owner had apparently noticed the lack of definition in his work and had endeavored to correct it, but unfortunately applied the correction the other way, so that he doubled the error. The young man is so tickled over the negatives he has made in the past few days that I suspect he takes them to bed with him. I fancy most of my professional readers might with advantage test the register of their holders before they do another thing.

But to return to my own troubles. Every one of my screens needed overhauling. One had to be packed out with bits of paper, two of



A DANISH VILLAGE-STREET
 DORFSTRASSE
 OTTO SCHARF





SOLVING THE PROBLEM

WILHELM WEIMER

them had to be trimmed down, but at length I got them perfect; so from that time on I had no worry about that phase of focusing, and could therefore concentrate my mind on the mechanical part.

One of the difficulties in high-power telephotography is the weakness of illumination due to the low working-aperture of the lens. Most of my exposures have been made with an anastigmat of eight and a half inches with an open aperture of $F/6.5$, but the fixed stop in the minus-tube seems to reduce the effective opening to the value of $F/11$, hence when eight-times magnification is employed the combination is working at $F/88$, which is considerably less than with the smallest stop of an ordinary lens. Furthermore, the objects at which the lens is pointed are long distances away; for instance, in making a photograph of a mountain twenty-five miles away the only definite points on which to focus consisted of pine trees outlined against a background of snow. Unaided vision in such cases is hopeless, so the focusing-magnifier becomes a necessity, but this in its turn brings troubles in its train, for it magnifies the grain of the screen in equal ratio with the image falling upon it.

To avoid the grain of the screen, circles of microscopic cover-glasses were cemented on the

ground-glass surface with Canada balsam. These were a big improvement, but I found my eye had a tendency to accommodate at times and I had always a lingering suspicion at the back of my head that possibly the definition left something to be desired. It is a nasty feeling; particularly when one has at length struck an ideal day, after making possibly a dozen trips as occasion offered, only to be disappointed by some atmospheric condition which made the taking of a fine negative impossible. So I tried my hand at the manufacture of fine ground-glass, with creditable results so far as the screen was concerned; but there was still too much grain in evidence, at least to suit me.

My next venture was to make a screen of barium sulphate. Those made by this process are very good, the grain being very, very fine; besides one can get almost any density desired from a slight milkiness to a dense white, all by slight variations in the manipulations. Under the focusing-glass the grain is almost imperceptible; furthermore, they are very easy to make. Buy an ounce of barium chloride and dissolve it in ten ounces of water. In another ten ounces of water dissolve one ounce of Epsom salts. Make up a new hypo-bath, without alum, then fix in it a few unexposed plates. Wash them in the ordinary way. Set half of them on the rack



EVENING IN THE KITCHEN

ALBERT GOTTHEIL

to dry; proceed with the others in the next stage of the process while wet. The density of the deposit of the barium sulphate in the film will depend very largely upon the amount of barium chloride absorbed by the gelatine, which will be greatest in the case of the dry plates, if they are soaked in the solution long enough.

To make the screens, begin by pouring out the solutions into separate dishes; immerse one of the wet plates in the barium solution for a minute; then, without rinsing, place it in the Epsom salts solution. To get a fine, even deposit, the immersion must be done gently, so as to avoid wave-markings. At once the barium precipitate is deposited in the pores of the gelatine. Soak the next plate for two minutes in the first solution; then, as before, transfer to the second bath. The plates which have been dried are treated in much the same way. You will thus get a number of screens of different qualities, probably all of them far finer than anything you ever had, fit for very delicate work. Once they are finished in the second bath, wash in a few changes of water and dry in the ordinary way. When dry, if you want a patch of clear glass for aerial focusing with a magnifier,

scrape away the film from a patch no bigger than a dime somewhere near the center of the plate.

I liked these screens, but there lingered in my head the memory of a method of focusing that I had read about over a dozen years ago, such that one knew surely when perfect definition had been secured, and I could not rest contented until I had got it. None of the books in my possession had any reference to it, but after months of pursuit I got the gist of it in a photographic annual. First, as to the theory on which the method is based. If we have a line on the ground-glass, perpendicular by preference, and if we focus on some object, bringing its image just beside the line, but not touching it, we will find that if definition is perfect the separation will remain constant when the magnifier (or the eye) is moved sideways. Therefore, any variation in the distance between line and object indicates faulty focusing.

The practical methods of application of this principle are fairly simple. Remove the film from an old negative by first soaking it in cold water, then gradually adding boiling water until the film melts. Once the plate is clean and dry,



WOODLAND MYSTERY

THEODORE EITEL

take a bit of tin the size of a dime, or, better still, a washer, and fasten it in the center of the glass by the help of a drop of sealing-wax. Next take a piece of glass about an inch square and fasten it to a bit of wood at least an inch thick, still using sealing-wax. Then apply a little fine emery and water to the plate and proceed to grind. The piece of metal in the center will protect the part below from your efforts. In about fifteen minutes you should have a fairly decent bit of ground-glass, one that is good enough—in fact, the coarse grain will give a brilliant image, while the fine focusing will be done through the clear portion.

Once the job is complete remove the wax in the center. Then if you have a painter-friend pay him a visit, taking along with you a piece of tinfoil such as is often found wrapped round tobacco and tea. Get him to cut with a very sharp knife a strip an inch long and not more than one-eighth of an inch wide. This is to be fastened with Japan varnish on the ground side, one of the edges being near the center of the clear space. To ensure its being perpendicular, its position should be marked by pencil lines.

To test its efficiency, focus on a telegraph-pole, a tree, or the window of a house, bringing

the object just alongside the tinfoil. First focus the magnifier on the edge of the tinfoil, and (luckily with this system of focusing critical definition is not essential at this stage) then move the eye or the glass sideways. If the image of the pole be the least bit out of perfect definition the distance between it and the tinfoil will vary.

All my telephoto negatives are made with a ray-filter, which, of course, greatly dims the light; in fact, my exposures on clear days run as high as ten seconds; but I can generally find within a quarter of a mile a tree on which to focus by the method given above. Definition attained, I turn the lens on my subject and go ahead, knowing for sure that there is nothing wrong about the definition of my negatives, whatever the other defects may be; and, incidentally, let me conclude by saying that telephotography by the seashore, particularly when one tries to catch an image of an object on the other side of forty miles of water, demands the ownership of a tremendous lot of perseverance.



To the painter of Nature nothing but the true is permitted. — *Alfred Stevens.*

Lenseless Panoramic and Stereoscopic Cameras

A. E. SWOYER

AMONG the branches of the photographic art scarcely followed by the amateur are those of stereoscopic and panoramic photography. This neglect is due, perhaps, to the fact that each requires special apparatus; we resolve for this reason to do without the occasional view which a panoramic camera would place within our reach and to buy such views as we care to use in the stereoscope. The amateur, and indeed the professional, is a creature of fads; a few years ago no photograph was approved unless of needlelike sharpness, while today we resort to special lenses, such as the "Smith," the "Spencer," and others, to secure that very softness and diffusion of focus which we used to be so careful to avoid.

This change of view led the author to experiment with the once well known but now almost forgotten "pinhole-camera"; and although it is highly improbable that he has discovered anything new in regard to an appliance in use for some three hundred years, it may be that certain forms of this camera as adapted to panoramic and stereoscopic work may be novel to the present generation.

Although it is not necessary to insult the intelligence of the reader by a description of the ordinary type of pinhole-camera, it is essential that the following facts concerning it be understood:—

(1). The pinhole is of infinite focus; that is, no matter whether the plate is two inches or eight inches from the aperture the image will be sharp.

(2). The pinhole may be made to include a greater angle of view than the finest wide angle lens.

(3). Although not giving the critical definition of a lens, the pinhole will portray all detail noted by the eye.

(4). Although not suited for snapshot work, some sizes of pinholes will register an image in much less time than currently understood; an exposure not exceeding thirty seconds being sufficient under normal conditions.

Having considered the capacity of the pinhole, we may now see in what manner we may avail ourselves of its advantages. The lens is never of infinite focus, no matter how closely it may approximate it; we therefore find that all panoramic apparatus on the market is provided with a revolving lens, as in the Panoram-Kodaks, or else the entire camera is made to revolve, as

in the Cirkut outfits; furthermore, since either the lens or the camera must revolve, time exposures are impossible. We at once see the advantage of the pinhole for this work; since we are not troubled with variable focii we have only one problem left to solve. It can readily be seen that the rays of light passing through a pinhole to the edges of a plate will travel a greater distance than those to its center—the old geometrical proposition that "the hypotenuse of a right-angle triangle is greater than either leg." This being true, there would be a difference in exposure between the center and the edges of the plate. But again gathering up our geometrical remnants, we remember that "any point in the circumference of a circle is equidistant from the center." It therefore remains only to arrange our sensitive medium in the arc of a circle with the plane of the pinhole as a center, and we may consider our problem solved. We cannot bend a plate into the arc of a circle, but we can so treat a *film*, the details of construction being as follows.

The construction of the box proper is naturally the first step and requires no special care save that necessary to make it absolutely light-tight; it should be painted a dead black inside.

The size of the box is regulated entirely by the size of the film to be used; for example, if we are planning to use film $3\frac{1}{4} \times 4\frac{1}{4}$, the length of each panoramic picture will be two times $4\frac{1}{4}$ or $8\frac{1}{2}$ inches. But this length is curved along the arc of a circle, being one hundred and forty degrees of its circumference—this angle being the largest practicable for our purpose. By proportion $140 : 180 = 8\frac{1}{2} : x$, if x is the semi-circumference of the circle. Solving, $x =$ eleven inches, approximately, and two times = twenty-two inches. Having a circumference of twenty-two inches, we find the radius to be three and five-tenths inches, which is the minimum inside length of the box for this film. For convenience, the length of box, size of picture, and other measurements are given in the attached table; all dimensions of the box being inside-measure.

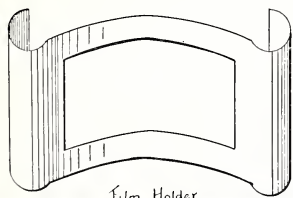
Although it has previously been stated that the pinhole is capable of giving an image embracing an extremely wide angle, the aperture may be so made that this advantage is nullified—the pinhole being in this case the "lens" or eye of the camera, is most important. If we could make a needlehole of infinitely small size in an infinitely thin material, we could (theo-



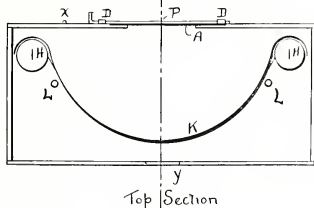
PINHOLE-LANDSCAPE WITH NINE-INCH DRAW
 THE SAME WITH SIXTEEN-INCH DRAW
 W. H. W. BICKNELL



Fig. I
Details of Panoramic Camera

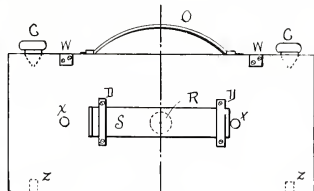


Film Holder



Top Section

Film	Length	Width	Depth	Picture
2½×4¼	3.5"	9"	2¾"	2½×8½"
3¼×4¼	3.5"	9"	3½"	3¼×8½"
3¼×5½	4.4"	11"	3½"	3¼×11"
4×5	4.1"	10½"	4¼"	4×10"

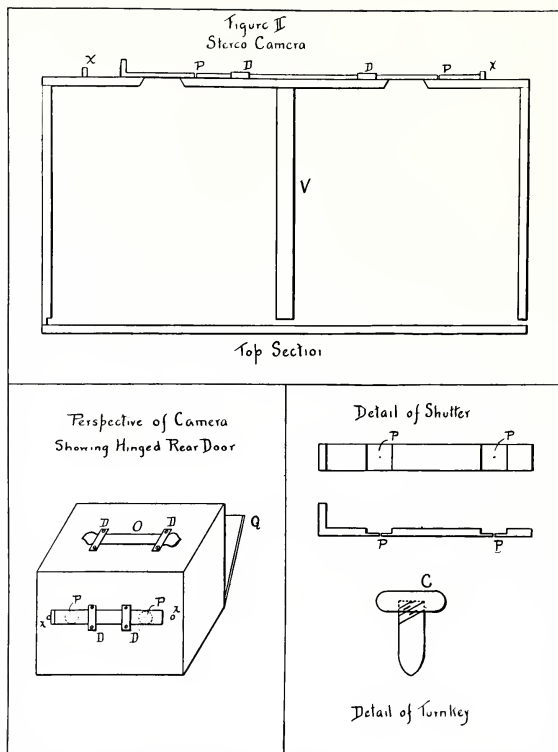


Front View.

retically) cover an angle of one hundred and eighty degrees; this is manifestly impossible: but as, conversely, the larger the needlehole and the thicker the shutter the less the angle covered, it may be seen that for perfect work the ideal conditions must be approached. The shutter should be made of spring brass, which is to be filed to extreme thinness at the point which it is intended to pierce. With the point of a hat-pin, or that of a very fine awl, press lightly on this thinned portion until it is raised slightly on the other side; rub this projection with fine emery-cloth until a minute aperture is made. Prominent workers have discovered that the number twelve needle makes the smallest practicable aperture, though number eight is perhaps better. Take a needle of this size and pass it through a small cork. The needle, thus handled, is used to enlarge and round out the aperture already made, care being taken to keep it at all times perpendicular to the surface of the shutter, and rounding the edges of the needlehole as smoothly as possible. Having made the "pinhole," one end of the shutter is bent up for convenience in handling in exposure: the shutter is then arranged to slide tightly in the guides D-D, which may be made of either wood or

metal. In order still further to reduce the length of the channel through which the light must pass, a hole of any convenient size should be cut in the front of the box and covered with a thin metal plate, A, Fig. I, through which a hole has been cut; it is necessary to have the center of this hole in the plate directly in the center of the front board, and to have the hole itself narrower than the shutter, as shown at R. The shutter being in place, slide it along until the pinhole coincides closely with the center of the hole R and drive the peg or nail "x" at the flat end of the shutter — in making exposures it is then only necessary to push the shutter until it is flush with this peg in order to be certain that the "lens" is open. Another peg, X, driven as shown at the other end of the shutter when pulled into the "closed" position, is a convenience.

We may now take up the construction of the most important part of our panoramic outfit — the film-holder. The holder and the pinhole are the two parts about which extreme care must be exercised in construction: if the pinhole is too large, the metal too thick or the edges ragged, a diffused and "fuzzy" image will be the result: if the holder is not built to hold the film in an



exact semi-circle with the plane of the pinhole as a center, the exposure will not be even. The length of the strip of tin of which the holder is made may be determined for any size of film by adding one inch to the width of the box as given for the corresponding film in the table. From the center of this strip, a piece of the dimensions under "Picture" must be cut and the edges carefully smoothed; the two ends are then turned back, as shown at H, for one and one-half inches from either end. The main curve should now be made, and must be an exact semi-circle of a radius equal to the dimension under "Length." All of this sounds complicated, but the matter is easily simplified by turning the job over to a tinsmith, who will make the holder for a few cents. The holder, once made, is set into the

box as shown in Fig. I; if the box and holder are correctly made according to dimensions, it should fit snugly, and may be tacked into place, additional film-guides being placed at L-L.

In the center of the curves H-H should be driven two round pegs Z-Z, the pegs being shaped to fit snugly into the opening in the film-spool. Corresponding holes must be bored in the top of the box so that the film-winders C-C may be inserted. These winders are shown in detail in Fig. I; they may be made of a three-eighths inch bolt cut to the proper length and one end swaged flat and filed to a knife-edge—a wing-nut screwed to the other end after it has been passed up through the hole in the top provides a convenient grip. The top of the



AN ARCHITECTURAL STUDY
THE CHALET
JOHN BURDETT WILLS



box should be hinged in front and be arranged to close tightly and lock at the back; for convenience, the strap or handle O may be added, and tripod-sockets at the bottom and at one end will prove an advantage. No finder is necessary, as the angle covered is so nearly that of the human vision that the view will be recorded practically as seen by the eye when at a level with the camera; this applies, however, only to the "long way" of the picture. One addition, and our panoranic camera is complete. A hole, say one-half inch or three-fourths inch in diameter, must be bored near the top of the rear of the camera, and exactly in the middle as shown at Y. This hole is to be covered with ruby glass or celluloid to form a window through which to read the numbers on the film.

In use, the film-spool is dropped into place on "Z" and the film led as in any roll-film camera to the winding-spool; the lid is shut down and clamped and the winders C-C forced down so that their sharp edges are firmly imbedded in the spools. Film is now wound off until the figure "2" appears opposite the hole Y, the friction keeping the film taut; exposure is made by means of the shutter. It should be carefully remembered that at each exposure with this camera *two* of the numbered sections of film are used; in winding film for successive exposures, therefore, every other number must be used. A safe and easy rule is to make exposures only when an *even* number is opposite the ruby window.

The apparatus required for a lensless stereoscopic camera does not require the same care in construction as does that for panoranic use; moreover, as one size of plate adapts itself ideally to stereoscopic purposes, we may consider that size alone and avoid a multiplicity of dimensions. The average separation of the human eyes is three and one-half inches; we therefore must arrange twin lenses or pinholes three and one-half inches apart, and separated by a partition, so that they may take duplicate pictures simultaneously. Since the five by seven plate is the most convenient in point of size, we may adopt it for our purpose and at once fix upon the inside dimensions of our box as five inches high, seven inches wide and four and one-half inches deep. In the center of the front of this box we fix the partition "V" as shown in Fig. II; in the center of the front of each of the two divisions thus formed, holes must be bored—these holes should be cut away as shown, in order to avoid the interception of any light-rays. The shutter is shown in detail in Fig. II; the pinholes should be exactly three and one-half inches apart and made as described in the portion of this article dealing with the panoranic camera:

we are, however, working at a smaller angle and may therefore use a number eleven needlehole, thus reducing exposure. In order to provide for the admission of the plateholder, the top of the stereoscopic camera is fixed and the rear hinged as a door arranged to clamp at the top. The two sides must be cut out as shown in order that the plateholder may fit in without light-leakage and may be held firmly in place when the door is closed. A finder is helpful with this camera, and may be approximated by driving a tack in the top of the camera directly over each pinhole, and one in the top of the center of the back; by "sighting" over these the image as covered on the plate may be gauged. The resulting negative will be found stereoscopically correct, but it is necessary to transpose the prints in mounting.

[Mr. Swoyer has ably presented the merits of the pinhole for certain sorts of work; but there is a wide field for it in ordinary landscape-work. Artists have always appreciated the soft definition, suppression of detail and rendering of atmosphere obtainable with the needle-hole. Lens-makers, too, have taken the quality of this device as a standard in producing soft-focus lenses. Those who cannot afford the lens can surely construct for themselves cheaply and easily the apparatus necessary to make artistic pictures. The illustrations by Mr. Bicknell were exposed in a homemade box designed to accommodate a Number 11 needlehole for 8 x 10 plates at various focal-distances. They show excellently one of the chief advantages of the pinhole—the ease with which one can vary the size of the image by changing the distance between pinhole and plate. Mr. Wills has produced many pleasing pictures, of which we selected a few which demonstrate the perfectly rectilinear image and soft rendering of detail obtainable through the minute aperture.]

Probably the chief disadvantage of the needle-hole is the lengthy exposure required, yet practical workers find that there is little difference, on development, between exposures ranging from thirty seconds to fifteen minutes. It is certain that this particular difficulty has been too much exaggerated in the past. The Watkins-Power system of numbering pinhole-apertures has greatly simplified the calculation of exposures. One takes for the F/number of the "objective" a value one-sixtieth of its actual number, calculates the time necessary for this stop by any of the usual methods, and then applies the correction by giving *minutes* instead of seconds.—*Editor.*]



“BARONESS ROTHSCHILD”
JOHN BRIDGETT WILLS



APPOINTMENTS — SLASHPEN RIVER
JOHN BRIDGETT WILLS



Good Breeding as an Asset

WHEN asked to contribute to PHOTO-ERA an original aphorism or motto — something for the general uplift of the professional photographer — Frank Scott Clark sent a characteristic reply:

"Some men have the ability to express themselves in good English, both in their conversation and in their correspondence, and others excel in making great pictures. But I am sorry to say that some of my brother picture-makers have, by years of practice, acquired a vocabulary fortunately little used by bankers, lawyers, doctors and clergymen. Now, photography is not a bad sort of work for men to be engaged in; and most of the women-patrons of the high-class practitioner are persons of refinement and culture, and the men-patrons are, at least, proper in their deportment and language. Now the question is — do we portrait-makers approach and treat these good people with adequate courtesy and respect? When a member of polite society enters the studio of the average portrait-painter, he or she is received in a manner that betrays the gentleman, the man of good breeding and

education. Whether the visitor wishes to discuss the matter of a sitting, or merely to look at the artist's work, he is met with manly courtesy and tact. The impression thus made upon the visitor frequently leads to an order.

"Let the picture-maker take this lesson to heart, particularly the home-portrait man, and remember that his standing as a maker of portraits, when backed up by an agreeable personality and a cultivated mind, is sure to go up several notches. It counts for something. The artists of the brush and the chisel will be glad to associate with him and, maybe, patronize him. Such men often can learn from a photographer who has ideas that are original and sound. But, as most artists are gentlemen, they have no use for photographers who have not, at least, gentlemanly instincts, and who permit themselves to indulge in low talk and profanity. It is good advertising to be well spoken of by professional artists — men who have made their mark in the world and who appreciate and respect a man who produces things of originality and worth."



ROYAL PROCLAMATION FROM THE MERCAT CROSS

JOHN MORFAT

EDITORIAL

Woman's Place in Photography

ONE of the most pleasing signs of the times is the presence of woman in professional photography. We have always contended that this department of activity—particularly the photography of women and children, in the studio or in the home—is a vocation for which woman is eminently fitted. A woman's instinct for neatness, system and order—so essential to the success of a photographic studio and not always found—her quickness of perception, her innate sense of beauty, her refinement and high artistic ideals, also her tact and quickness in executing a task, qualify her in a high degree to follow photography as a business. To these eminent qualifications must be added woman's high sense of honor and propriety, as well as the generally agreeable personality so necessary in meeting sitters and managing them before the camera.

If necessary, one could cite many examples of women who have achieved fame as painters of portraits, such as Angelica Kauffmann, Madame Vigée Le Brun and Cecilia Beaux. So, too, in professional photography, one may find numerous instances of women who have attained marked success. It is not generally known that the magnificent portraits produced at Duehrkoop's studio in Hamburg are personally produced by a woman—the daughter of Mr. Duehrkoop, Minya Diez-Duehrkoop. We have frequently referred with enthusiasm to the splendid work of such native women-photographers as Gertrude Käsebier, Mary Carnell, Blanche Reineke, Mrs. W. W. Pierce, Nancy Ford Cones, Katherine Bingham and Katherine B. Stanley.

There are many delicate and intricate questions which have baffled the efforts of some of our prominent workers and which, no doubt, can be solved by our women-photographers. These difficult tasks would seem to be more easily accomplished by an organization of women-practitioners having capable leaders. There is no doubt in our mind that much important work can be done in this direction by women, because they can exert a more powerful influence upon our legislators, particularly where men have failed. Every state should have a law to protect the public against greedy and unscrupulous photographers; but this, it seems to us, cannot be brought about without the help of the women in photography strongly organized and intelli-

gently led. This is one of the gravest problems which confronts professional photography to-day, and, unless something is done very soon, it will react unfavorably upon the profession and its practitioners. It seems a pity that, while many excellent ideas are being advanced to elevate the profession, much is being done to degrade it, though woman is contributing in no small way to dignity and grace the pursuit. PHOTO-ERA will do all that is possible to further the interests of the Women's Federation and heartily support individual practitioners of real merit.

Broad-Gauged Exhibitions

WHEN an exhibition of magnitude and excellence, like the one very recently held in Newark, under the auspices of the Newark Museum Association, and reviewed by its projector, Edward R. Dickson, in this issue, can be conducted with catholicism, dignity and fairness, it is always a subject for congratulation. Jealousy, bickerings, rancor and animosity have no place in a pictorial display designed to elevate and to inspire, and to make for wholesome advance by individual or concerted effort. There is infinite satisfaction, even glory, for those who elect to support enterprises which are conducted on broad, liberal and altruistic principles. The progress of art is retarded when it is dominated by a set of men actuated by a spirit of absolutism and selfishness. Crass, sensational methods of advertising should be avoided. A manly, dignified course in obtaining publicity inspires confidence, and is much to be preferred.

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THE perfect negative is for the studio-worker, not for the home-portrait artist. Indoor-photography never enters into an architect's calculations. Therefore, the one who takes up home-portraiture as a specialty, must first master the art of printing. Given a thorough working-knowledge of this, a true artistic sense in composition and lighting, an insight into the psychology of the child, and a reasonable success is assured. Certainly it is a most fascinating field, and one with almost limitless possibilities. — *Katherine B. Stanley.*

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HIGHER ideals in photography will be reached only through organization based on Fraternal principles. — *Harry A. Bliss.*

THE ROUND ROBIN GUILD

An Association of Amateur Photographers

Conducted by ELIZABETH FLINT WADE

This association, conducted under the auspices of PHOTO-ERA, and of which PHOTO-ERA is the official organ, is intended primarily for the benefit of beginners in photography, although advanced camerists are just as welcome and many are numbered among its members. The aim of the association is to assist photographers by giving them information, advice and criticism in the Guild pages of PHOTO-ERA and by personal correspondence. Membership is free and may be obtained by sending name and address to PHOTO-ERA, The Round Robin Guild, 383 Boylston Street, Boston. Send a stamp for complete prospectus.

Water-Craft

THE subject for our June competition is one which offers special attractions, for there is perhaps no object which comes within the scope of the lens which is more interesting or can be made to render more artistic pictures than the various types of water-craft.

Shipping is always attractive, and under this head one may include all sorts of vessels from the tiny dory with its one sail to the majestic full-rigged ship, the latter craft being seldom seen now and for that reason being a much-sought subject for the marine photographer. The amateur living in a sea- or lake-port has many more opportunities to make pictures of water-craft than does the transient visitor, but if the transient will only make his plans well beforehand, study up a little on what are the precautions necessary in making marine pictures and inform himself on what constitutes the artistic merits of such pictures, he has the same chance to get satisfactory results as does the amateur who lives "long shore."

The amateur must make himself familiar with the conditions which make marine pictures a success. He must first consider the actinic quality of the light, which is many degrees stronger on the water than it is a few miles inland. The exposure of the plate must be very much quicker than for a landscape and the lens must be stopped down more, particularly on sunny days. For one who is making his first experiments in marine photography it is advisable to use an exposure-meter or else make one or two exposures and develop the plates in order to determine whether or not the exposure is rapid enough. The early morning offers some fine opportunities for an atmospheric effect, owing to the mist or fog, which often rises in the dawn and does not dispel till ten o'clock perhaps; whereas the late afternoon with its long, transparent shadows gives another artistic effect to the picture. Even a foggy day is not to be overlooked, for fog has much luminous quality and the lens discerns and records objects which are only faintly seen by the eye and sometimes not seen at all.

The point of view must be chosen so as not to get a direct broadside, for this view of the vessel is neither interesting nor artistic. A front or rear view of a yacht is always good unless the camera points exactly at the bow, or the stern, as the case may be. A slight angle gives pleasing lines, and so does a three-quarter view. With the sun shining full on a vessel, one loses the modeling, and so one should try to locate himself to get the side toward the camera partly in shadow. One will then get beautiful halftones and soft detail.

Vessels lying at anchor, particularly odd-looking craft like old fishing-boats, luggers, etc., afford very interesting subjects for pictures. The long reflections of the vessels in the water add much to the composition of the picture. One who is familiar with the marines of F. Hopkinson Smith will recall how fond he is of paint-

ing vessels at anchor with long ripples flowing away from the stern or bow of the boat, and how very effective the shadows on these ripples make the picture. One can secure just this effect in his photograph if he takes pains to choose the time and the place. Indeed, there have been published in PHOTO-ERA pictures of this class very artistic in composition and of interest to those not familiar with the scene. This is one of the qualities which determine whether a picture is worth while or not — if the picture is interesting to most people who see it, then the picture is worth keeping, but if it is interesting only to the ones who know the locality or the subject then the picture has little intrinsic merit.

In developing marines the editor has found that a slow-working developer gives better results than too quick-acting a solution. If tank-development is used, the developer should be diluted half as much more as for the ordinary negative. The slower action seems to bring out detail better and give softer and more harmonious contrasts.

Although the steamship is the most prosaic of water-craft, the "seeing eye" can discern artistic possibilities even in this modern craft; but one chooses a misty, moisty day, and gets not a "fuzzy" picture but an approach to "impressionism" which gives a suggestion of effect without elaboration of details. Such a picture may be made very interesting if one only uses his camera with brains.

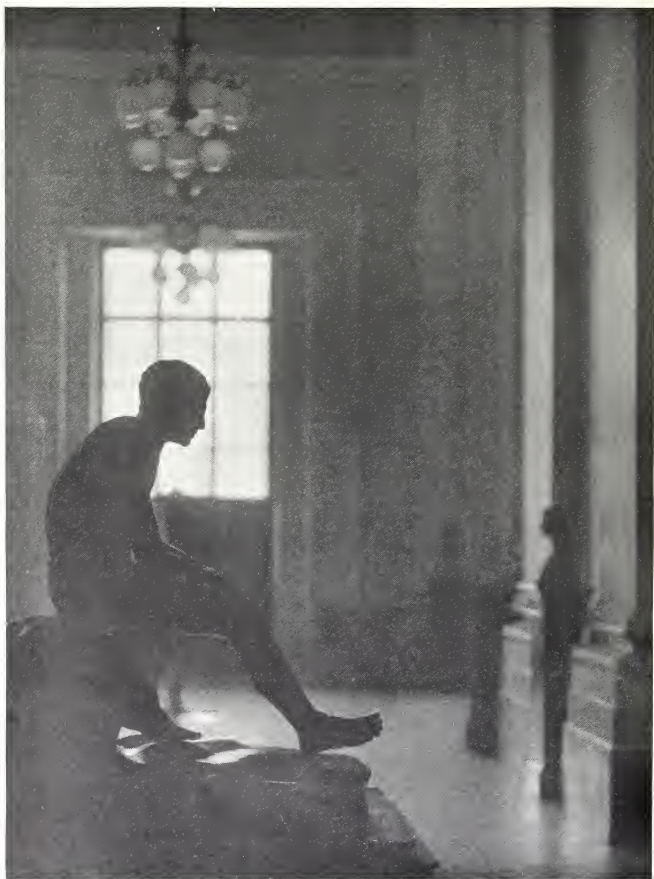
Gardens

ONE could perhaps find no more worthy subject for his camera at this time of year than the subject chosen for our July competition — "Gardens."

Old-fashioned flower-gardens are just now the order of the day, and even though one owns the smallest plot of ground — a very pocket-handkerchief of a plot — even this tiny bit of earth is not allowed to go to waste, but is made to blossom like the rose — and such dainty blossoms, such eye-pleasing arrangements! The beds of colons and the flaring mounds of scarlet geraniums have disappeared and are replaced with the old-time garden favorites with their sweet scents, their soft colorings, and their stately bearing.

These gardens, even the little ones, present many picturesque possibilities. Garden-lovers with larger purses, and consequently larger spaces in which to indulge their tastes, have introduced into their gardens vine-clad arbors, vine-draped gateways, and pretty garden-seats, and by a judicious arrangement of paths and flower-beds made charming vistas which seem to lead on and on to still more delightful places. In this respect they have taken a leaf out of the book of the Japanese gardener, who creates in a space perhaps twenty feet square a garden which deceives one into believing it is many times as large.

The sundial has again become a feature of the garden, and consequently its price is constantly rising. A few



IN THE MUSEUM
EDWARD R. DICKSON
FIRST PRIZE —
ARTISTIC INTERIORS



AN ITALIAN KITCHEN
R. M. WEED
SECOND PRIZE —
ARTISTIC INTERIORS



years ago the old stone lanterns used by the Japanese came over from that country as ballast, but these decorative objects were immediately seized upon by a man who saw their artistic possibilities and these lanterns or their fellows are now on sale at several of the shops which import foreign goods, their prices ranging from fifteen to fifty dollars, and very interesting objects they are when set up in a garden and add much to the picturesqueness of the scene.

In making pictures of gardens for this contest one need not strive to photograph the whole enclosure on one plate. Glimpses of a garden are far more artistic, the vista through an arbor, a glimpse through an artistic gateway, a corner where the tall hollyhocks stand guard, or a pretty herbaceous border — these pictures are much more interesting and suggestive than those which include on the plate the whole of the garden, however beautiful.

It seems almost superfluous to suggest the use of orthochromatic plates for this purpose, but one must strive for color-values as well as for artistic composition in a subject of this kind.

Now that gardens have come to stay and gardening-magazines are constantly multiplying, the amateur may find profit as well as pleasure in making pretty garden-pictures, for the garden-magazine is always on the alert for well-pictured original ideas in gardens.

A Word about Plates

THERE seems to be a general belief among amateurs of rather limited experience that the more rapid the plate used, the better chance one has of securing a good negative. Now, one should bear in mind that "the battle is not always to the swift," and the best and most satisfactory negative is not always obtained with a super-sensitive plate.

Each month there is published at the end of the Guild Department a list of plates arranged according to speed, and an exposure-table arranged for one special degree of plates, the plate chosen being one which is adopted for all-around work both in- and out-doors. By referring to the list, one will see that in this class — Class I — there are more makes of plates than in any other of the classes,

so that one has a wide choice of brands, and whichever plate he chooses from this class will give practically the same results, for the sensitiveness of plates does not vary much.

There are three classes of plates of greater speed than Class I, and nine classes of slower speed. Those of greater speed are designed for instantaneous exposures when the light is very poor, for photographing swiftly-moving objects, and for recording the finish of races where great accuracy must be observed. They are not for ordinary uses, and the amateur would do well to leave them off his list until his photographic experience warrants their use.

A rapid plate does not give as great contrasts as does a slower plate given a trifle longer exposure, but it has what is called "mellow" qualities, and gives a clear, quick-printing negative.

The plates listed in Class I $\frac{1}{4}$ are particularly good for portrait-work. They have great latitude of exposure without danger of fogging by overexposure. Then, too, they give a negative with beautiful halftones and soft highlights, a most desirable point in portrait-work. They have abundance of detail, and the shadows have a transparency which is not always obtainable in the faster plate.

The plates for photographing interiors and for night-photography are of course the nonhalation plates. A few years ago these plates were scarcely known and, in fact, were not very satisfactory; but continued experiment has made them almost impervious to halation such as is recorded on the ordinary plate when it is used where windows are included in interior-views, or where lights come within the angle of the lens. Formerly the nonhalation plates required a much longer exposure than the ordinary plate, but now some brands are as quick as the plates listed in Class I, while the *Lumières* have succeeded in making a nonhalation plate which is extremely rapid.

To obtain true color-values when photographing textiles, paintings, flowers, etc., one must use the plates sensitized for colors, which come under the name of orthochromatic and isochromatic. For photographing paintings the slow isochromatic or the panchromatic



AN INTERIOR
EDWARD H. WESTON
THIRD PRIZE —
ARTISTIC INTERIORS

(red-sensitive) is the one to be preferred and also when photographing wood, where it is necessary to portray the grain with proper contrast.

Plates are made particularly for commercial work such as the photographing of furniture, china, hardware, etc., and these are sensitized so as to give good density and strong contrasts. These plates are slow, but as the objects photographed are without life, one may take his time in making the exposure.

A brand of plates which is particularly designed for copying drawings, plans, maps, engravings, etc., is called contrast-plates or process-plates. These subjects copied on an ordinary plate are likely to be flat and a good print cannot be obtained from them; but when the process-plate is used the resulting photograph is as good as and often even better in contrast than the original.

There are three points which govern the exposure of a plate: first, the sensitiveness of the plate; second, the size of the stop; and third, the actinic power of the light. One might add a fourth and say the character of the subject to be photographed.

Exposure-meters are helpful adjuncts when calculating the time of an exposure, but the best guide (and the one which the amateur should train himself to depend upon) is the brilliancy of the image on the ground-glass. The eye soon learns to measure the actinic power of the light. Strongly-lighted scenes show a sharp and distinct image on the ground-glass; dimly-lighted places make it very hard to distinguish any detail. Between these two extremes there are many gradations of light, and by noting the clearness or dimness of the image one comes to know almost intuitively the correct time of exposure to secure the proper density in the negative.

Plates of extra speed are rich in silver and need to be handled with great care. It is almost necessary to use bromide of potassium when developing in order to hold back the action of the developer.

Flatness or lack of strong highlights in a negative is usually due to overtiming. One of the best of developers to use on overexposed plates is glycin and hydroquinone. The combined action controls the appearance of the image and produces contrast. The formula is prepared as follows: Glycin, 60 grains; hydroquinone, 60 grains;

sodium sulphite (crystals), 3 oz.; sodium⁸ carbonate (crystals), $1\frac{1}{2}$ oz.; potassium bromide, 30 grains; water, 20 ounces.

If the plate is known to be overexposed, use this developer, which will keep well in solution if the bottle is tightly corked. In developing, when one comes across a plate which comes up as an overexposure, take it from the developer, rinse well and transfer it to the glycin-hydroquinone developer. This makes an excellent tank-developer by diluting, using an ounce of the stock-solution to 20 oz. of water. Negatives developed by this method show beautiful contrasts, brilliant highlights and clear shadows full of detail.

Photographing Still-Life Subjects

A PHASE of photographic work which requires patience is making studies of still-life, and there is no reason (except perhaps one's own personal limitations) why an amateur could not make studies suitable for decorative borders, titles and book-cover designs—in fact, any study of this class which may be used either for decorative-work or for illustration.

The amateur need not be hampered because he has a small camera. The negative may be made as carefully as with the larger camera and enlargements made direct from the small negative, or one may make an enlarged negative, a desirable thing to do if there are many prints to make of the one subject.

Flowers are the most popular as well as the most satisfactory of still-life studies for the reason that they are not only particularly graceful in line, but they also have great variation of form, so one has only to select a certain species to carry out any design he may have in mind.

One mistake which the beginner who has had very little or no art-training makes is in massing too many flowers in a bunch or else combining several varieties of flowers. A single specimen selected with due regard to its "composing" qualities will make a picture well worth while, whereas the mass or bunch of flowers will hardly merit a second glance. It takes a real artist to paint or to photograph a bunch of flowers so as to make them appear natural and graceful; consequently, unless the amateur is a "real artist" he would do well to con-

COASTING

CLIFFORD L. BURDICK

THIRD PRIZE —

WINTER-SPORTS



fine himself to simple arrangements and select specimens of the blossoms chosen for this work.

In the first place, one should study the appearance of a blossom. Even the pure white blossoms have no strong highlights and no deep shadows. The highlights on a flower have great translucency, except in the heavy-petaled flowers, like the camelia, for instance. The shadows have a beautiful transparency, and this is what one should strive for in his photograph — translucency in the highlights and transparency in the shadows. Lilies, which are a favorite subject for flower-studies, have this quality; and one may obtain it by arranging his lighting so as to bring it out in his negative.

The best light for photographing flowers is indoors near a north window. The north light varies the least of any during the day and that is the reason why artists choose it for lighting their studios. They can be sure of a uniform light during the greater portion of the day. The subject should be placed far enough from the window so that there will be no strong highlights either on the subject or the background. For white flowers the ordinary plate may be used, but for all colored flowers one gets the best results with the orthochromatic plate, for otherwise one will get too deep a tone in the print and the modeling of the flower will be lost in the shadows.

Although flowers make very interesting pictures, one should not overlook the possibilities of the vines and meadow-grasses. Certain weeds may be chosen for decorative effects, and though the cultivated flowers are not to be neglected the amateur will find his most interesting studies in the wild-flowers, particularly when selecting a subject for decorative effects.

Plants which make very decorative borders are what are commonly known as "rosette" plants — plants whose leaves grow in symmetrical circles closely overlapping each other, giving the appearance of a rosette.

Single flowers like the poppy (using buds, flowers and leaves) make very pleasing pictures. The poppy makes an effective panel, as does also the garden anemone, the cosmos, the bachelor's button, etc. A flower which makes a very artistic border is the nasturtium, which grows in so many turns and twists. In using the flower

for a border-study one should mark on the focusing glass the outlines of a border, then arrange his flowers to come within the compass of the lines. It will not detract from the appearance of the design to have a leaf or blossom stray beyond the lines, only it must conform to the artistic composition of the study. Indeed, it helps the decorative effect in many cases to have the flowers stray beyond the line of vision.

In making decorative studies the flowers are seldom arranged in a vase. For illustrative work a vase or bowl may be used. Referring again to the nasturtium, when they are arranged in a plain glass bowl through which the stems of the flowers may be seen they make a very pleasing picture. In arranging a lily in a vase, a very slender glass vase which flares at the top is used, but the vase should never be of such a character as to obtrude itself on the notice to the neglect of the flower the real subject of the picture.

In the matter of backgrounds, one suits the ground to the nature and color of the flower. With white flowers the leaves of which are not too dark a green, one may use a gray background of a deep tone; and for colored flowers a very light gray or buff, or a very deep cream makes a pleasing tone. A clear white is used for studies designed to be used as borders or tailpieces in periodicals, and the material for this purpose may be Bristol-board placed far enough away from the flowers to be out of focus, and also so arranged that the subject will not cast a shadow on it. This must be done with all backgrounds, or else one is sure to get a rather bizarre effect. When one is advanced in the making of flower-studies, he may succeed with shadow-effect, roses being one of the flowers with which the best results are obtained.

For backgrounds the ingrain wall-papers may be used with good effect, always placing them far enough away from the subject to throw them entirely out of focus.

To secure roundness and modeling in the flower, one should use a rather large stop. The smaller stop tends to give sharpness at the expense of modeling.

For the developer one cannot do better than use metol-hydroquinone, and the plate should not be allowed to get too dense, a thinner plate producing a more pleasing study.

The paper chosen for the print varies of course with the quality of the negative and the subject itself. Mat paper of not too smooth a quality is admirable, while the smooth surface paper is the best for flowers of very soft petals. One will be likely to have better results by using a printing-out paper instead of the gaslight-paper for flower-studies, though if one works with care the gaslight-papers will give very good prints, the main trouble with them being that it is hard to regulate the exact tone so as to get just the right degree of printing. Platinum paper is very well adapted to still-life studies of almost any character.

In arranging flowers, do not turn all the "faces" toward the camera, and when more than one spray is to be used, take three instead of two, for where one has only two blossoms in the picture the eye is divided in its interest, while if three are used and well arranged the eye comprehends the picture as a whole and does not search out the spots of light as when two blossoms only are used.

For object-lessons in decorative flower-work, one need not go far afield, for in the pages of PHOTO-ERA one may find many fine examples, while on the cover of the May number one will find a subject so well done that it is well worth imitating.

An Object-Lesson

THE subject of the monthly competition for July, 1908 was "Harbor Scenes," and the prize-winning pictures were published in the November issue of PHOTO-ERA for that year. The pictures were such excellent object-lessons in "Water-Craft" that they should be looked up for the benefit of those of our members who contemplate taking part in the current contest.

This picture is a good example of what to strive for in pictures of this class. The values are unusually good, while the shadows in the ripples on the water complete an excellent composition. One might think that the small boat at the left should have been left out of the picture because it would seem to divide the interest between the principal object and itself, but the fact that it is lighter in tone than the vessel obviates a divided interest. Indeed, if the small boat were taken out of the picture it would lose greatly in composition. This photograph was taken on a foggy morning, verifying what the editor has said about taking pictures in the fog and of its luminous quality. The artist chose a happy moment for the exposure, showing not only that the eye was trained to observe carefully, but also that the hand was trained to manipulate the camera, so that the exposure was made at just the right moment.

Another picture which should be referred to, this time in the issue of December, 1908, is entitled "Shasta Daisies." Three yellow daisies have been grouped together, and the background against which they are placed is a china bowl. The light coming from one side throws a shadow into the bowl, giving a very effective background, one which it would be hard to get except under just these conditions. It was a very original idea to use the bowl for a background, and one which would be worth while following, if one wished to get similar effects. The rim of the bowl makes the outline of the picture. The tones of the flowers are soft and pleasing, but one might wish that one of the flowers had been turned a little more to one side to suggest a more natural pose of the blossoms, but taken as a whole this picture is a most excellent example of decorative photography and the possibilities of using everyday things to produce a picture worth while. One does not need to go far afield if he will only stop first to consider what he has which lies close at hand.



A FOGGY MORNING

LEON JEANNE

HONORABLE MENTION —

MY FAVORITE PHOTOGRAPH

Speed-Pictures from a Moving Train

IN MR. C. H. CLAUDY'S article in the April PHOTO-ERA occurred a statement that it is essential in speed-work to hold the camera still, just as in ordinary work. One of our subscribers takes exception to this passage and encloses two prints made in 1/1000 sec. from the rear platform of a train going about forty miles an hour. In answer to the critic, Mr. Claudy writes as follows:—

"Pictures taken from either end of a railway-train do not produce very much relative motion in a camera, as would be the case were they taken from the side of the train. Moreover, I had reference more to unsteadiness of hand than to actual motion of camera. If you will take your instrument and revolve yourself rapidly in a quarter-circle and take a picture while doing so, you will be very likely to find it blurred because a distant landscape in such a case will be traveling past your lens at a speed of several miles a second, which is too great for the average shutter to stop successfully."

The Round Robin Guild Monthly Competitions

*Closing the last day of every month.
Address all prints for competition to PHOTO-ERA,
The Round Robin Guild Competition, 383 Boyl-
ston St., Boston, U.S.A.*

Prizes

First Prize: Value \$10.00.

Second Prize: Value \$5.00.

Third Prize: Value \$2.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning picture, or in later issues, will be given Honorable Mention.

Prizes may be chosen by the winner, and will be awarded in photographic materials of any nature advertised in PHOTO-ERA.

Rules

1. These competitions are free and open to all photographers, whether or not subscribers to PHOTO-ERA.

2. As many prints as desired, in any medium except blue-print, may be entered, but they must represent the unaided work of the competitor from start to finish, and must be artistically mounted.

3. The right is reserved to withhold from the competitions all prints not up to the PHOTO-ERA standard.

4. A package of prints will not be considered eligible unless return-postage at the rate of one cent for each two ounces or fraction is sent with the data.

5. Each print entered must bear the maker's name, address, Guild-number, the title of the picture and the name and month of the competition, and should be accompanied by a letter SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in letter.

6. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA. If suitable, they will be reproduced, full credit in each case being given to the maker.

Notice to Prize-Winners

These contests are open to everybody except those who have won three or more prizes. Such contributors, however, may continue to send work in a special class, as announced in "Our Illustrations" for June. Honors will be awarded only to pictures of exceptional merit.

Subjects for Competition

May—"Decorative Flower-Studies." Closes June 30.
June—"Water-Craft." Closes July 31.
July—"Gardens." Closes August 31.
August—"Wood-Interiors." Closes September 30.
September—"Shore-Scenes." Closes October 31.
October—"Rainy Days." Closes November 30.
November—"Christmas Cards." Closes December 31.
December—"Home-Scenes." Closes January 31.

Awards—Artistic Interiors

First Prize: Edward R. Dickson.

Second Prize: R. M. Weed.

Third Prize: Edward H. Weston.

Special Award: Charles Vandervelde.

Honorable Mention: James M. Boismot, C. Elmer Meade, Mrs. S. B. November, D. Steiner Ponder, Ralph D. Reed.

BEGINNERS' COLUMN

Quarterly Contests for Beginners

In these contests all Guild members are eligible PROVIDED THEY HAVE NEVER RECEIVED ANY PRIZES OR HONORABLE MENTIONS in the past, FROM ANY SOURCE, AND PROVIDED ALSO THAT THEY HAVE NOT BEEN MAKING PHOTOGRAPHS MORE THAN ONE YEAR.

All prints submitted, except prize-winners, will be returned if postage is sent in a separate letter with the data. See rules 4 and 5 in opposite column.

Prizes

First Prize: Value \$5.00.

Second Prize: Value \$2.50.

Third Prize: Value \$1.50.

Honorable Mention: Those whose work is worthy will be given Honorable Mention.

A Definition of the Beginner

COMPETITORS in the Quarterly Contests for Beginners will please take note of the strict definition of the beginner which has appeared in the last few issues of PHOTO-ERA. The tightening of the lines was made necessary by the fact that many contestants sent for these events work which was clearly the output of experts, thus taking advantage of the genuine beginners, viz., camerists of less than one year's experience.

Subjects for Competition

SPRING-PICTURES—CLOSES JULY 15, 1911

Landscapes of trees in bud, early vegetation, late snow in the woods, flowering trees and shrubs, April showers and cloudy skies. Landscapes made on orthochromatic plates with a ray-filter not later than May 20.

VACATION-PICTURES—CLOSES OCTOBER 15, 1911

It may seem that "Vacation-Pictures" is a pretty broad term, but the editors desire to give the real beginners a chance to enter any good pictures they may make during their summer holidays. For this reason it was decided to make the subject broad enough to include everything which might in any way illustrate the title. Thus, snapshots of landscapes, seascapes, figures, animals, buildings and any other objects which offer good compositions or interesting pictures may be included.

To get the greatest benefit out of these quarterly contests, each Guild-member who is thinking of entering any prints should undertake a little course of study covering the field in which he contemplates working. There are plenty of booklets for beginners, some on the photographic processes themselves and others on special fields, such as hand-camera work, marines, landscapes, and orthochromatic photography. These the clerks in the stock-houses will be only too glad to get for you. Technical excellence is necessary if the pictures are to have a chance of success. The negatives must be properly exposed and developed and the prints as good as you can make from them. But the intelligent worker will do more than make a good photograph; he will select his subjects with regard to the laws of composition and remember that some definite idea must be present in his mind to justify the exposure. Perhaps the easiest general rule is to secure simplicity by working close to the subject so as to get a large image and thus exclude extraneous objects, particularly such as would come out nearly white in the print and distract the eye from the principal object.

Answers to Correspondents

Readers wishing information upon any point in connection with their photographic work are invited to make use of this department. Address all inquiries to ELIZABETH FLINT WADE, 743 East 27th Street, Paterson, N. J. If a personal reply is desired, a self-addressed, stamped envelope must be enclosed.

O. J. T.—You can buy **Blue-Print Powders** ready for use, an ounce bottle costing 15 cents. All that is necessary to prepare it is to dissolve it in a certain quantity of water, when it is ready for use. You will probably find the ready-prepared powder more convenient for your use than to mix the solution yourself. It keeps indefinitely and may be used on cloth as well as on paper and postcards.

BERTHA BARNETT.—**Spotting-Colors** are colors specially prepared for spotting photographs. They usually come in four colors, black, white, brown and sepia; and one can get almost any range of tone for the photograph by combining these colors. The colors are spread on celluloid cards which are fastened together. To use, one moistens the brush and takes up a little color from the card which matches his print. The colors sink into the paper and are not noticeable after they are dry. They cost from 15 cents to 50 cents according to the size.

S. D. SEWARD.—You will find the **Porcelain Trays** best for toning prints. They are pure white and very heavy. They are so highly glazed that one can use them for many years without cracking. Acids do not seem to affect them, though hypo will after a time. If they are slightly discolored from the toning-bath the application of a little soap-powder will remove the stain, but if it is too obstinate, a moderately strong solution of muriatic or of oxalic acid will act as a cleanser.

GERTRUDE M. DODDS.—**Unless a Photograph Has Been Copyrighted** by the first publication in which it is reproduced there is no law against sending it to another publication for reproduction, or for entering it in prize-contests as often as you choose. No magazine which copyrights its articles and pictures will accept anything which has been published before, and a picture which has been copyrighted, if reproduced without permission of the owners of the copyright, renders the periodical so using liable to prosecution. If you will observe the illustrations used you will note that sometimes one has printed beneath it, "Published by permission of, etc.," showing that the picture has been copyrighted.

E. M. ELLIS.—**An Automatic Shutter** is one that works by a self-acting device. For instance the movement of the shutter to make an exposure also sets it for the next exposure, so that it works, as it is termed, "automatically." Most of the small box-cameras have automatic shutters.

CHARLES MARTIN.—**Acetate of Soda** used in the toning-bath makes a very brilliant print. It clears up the whites and brings out the tones well. When acetate of soda is used, it must be added to the bath at least an hour before the bath is to be used, otherwise it will have no action whatever.

B. D. FLODER.—**The Paper Used by Photographers for Wrapping Proofs** is yellow postoffice paper. This paper is non-actinic, and prints wrapped in it will keep a long time without discoloring. This is a useful paper to keep in stock, for it has many uses. A sheet run on a piece of wire and the wire slipped over

the lamp-chimney when making gaslight-prints will make a good shield for the light without obscuring it too much, and will prevent fogging of prints when thus shadowed from the direct rays of the light. It also makes good masks and cutouts.

MORRIS CHESTER.—**A Formula for Glycin Developer for Tank-Development** is made as follows: Glycin, 120 grains; sodium carbonate (dry), 1 oz.; sodium sulphite (anhydrous), $\frac{1}{4}$ oz.; water, 15 oz. Dissolve the carbonate in hot water, and then add the sulphite and the glycin. For use take one ounce of the stock-solution and fifteen ounces of water. Development takes place in about half an hour. If the developer is diluted twice as much more the plates may be left to develop for three or four hours. The negatives are of a warm black color and of fine printing-quality.

WILL B. N.—**The Spots of Local Fog** on your plates are due to the camera's leaking light. This is shown by the spots' being always in the same location on each plate. There may be a tiny pinhole in the bellows, and if you are not able to discover the leak yourself it would be wise for you to take the camera to your dealer or to an expert and have not only the leak located but also repaired.

G. H. L.—You will find **Films Better Than Plates to Carry when Traveling**. Plates are not only cumbersome but they are much more liable to damage than are films. If your camera is not fitted with a film-pack-adaptor you can get one at very reasonable price, the modern film-pack being particularly fine for use, and as easy to manipulate as the roll-films.

EDWIN O. NEWTON.—**You Can Carry Your Developer in Powder Form when Traveling**. Have the ingredients put up in small packets, enough for one batch of developer; then, when wanted for use, you simply dissolve a package in water. If one can manage to do so, it is a wise plan to develop one's negatives when on an outing of some duration so as to ascertain not only whether the exposures are all right, but also to see that the camera is in good working-order and is not fogging the films.

FRED. M. B.—**The Angle of View of a Lens** means the number of degrees included in the sweep of the horizon recorded by it. The circumference of the earth is divided into three hundred and sixty degrees, a quarter of which would be ninety degrees. An ordinary lens includes a sixth of the circumference of the earth, taking in about sixty degrees. When a lens takes in or includes eighty degrees, for instance, it is called a wide-angle lens, and this kind of lens is used for making interior-studies or certain architectural views which do not permit the camera to be set a sufficient distance away to include all that is required in the view.

E. W. STAFFORD.—**To Clean Bottles** stained with photographic solutions, fill them with washing-soda and water and let them stand over night. In the morning pour out half the liquid, drop a handful of bird-shot into the bottle and shake vigorously. The stains will come off quickly, leaving the glass clear as at first. If shot is not available, use bits of eggshell or coarse gravel.

P. L. R.—**Your Formula for Glycin** is a very good one. You can make it up in what is called a stock-solution and dilute when needed. This developing-agent gives negatives of fine grain and is therefore a good developer to choose when making negatives for enlargements. See answer to Morris Chester for a formula for a glycin tank-developer.

THOMAS G. E.—**Japanese Tissue-Paper** may be bought of almost any dealer in Japanese goods. It is also imported by dealers in papers of decorative character. This paper makes very fine photographs, and

though it is very thin and one must exercise care in handling it, it is tough and does not tear easily. It is of a creamy tint and has the appearance of a fabric more than that of a paper. In salting it, if a little gum-arabic is added to the salting-solution it seems to give more body to the paper. The prints which you enclose are from overexposed negatives, which yield flatness or lack of contrast.

S. L. H.—The Red Spots which Appear on Aristo Prints may occasionally be removed by dipping a bit of cotton in the gold-solution used for toning and rubbing the spots gently till they disappear, which is almost immediately. Finger-marks put on the prints before toning cause discoloration, and one should take great care not to touch the surface of the paper until after it is toned and fixed. Prevention is the most efficient of remedies.

HARRIET TUTTLE.—You can Re-Enamel Your Trays by getting a can of what is called "Tray Enamel" and painting your trays with the solution. The liquid is applied with a brush, and the article to be enameled must be perfectly dry. It must stand for at least twenty-four hours to dry and harden. This enamel is warranted to withstand the action of chemicals and not to peel, crack or blister.

C. D. S.—To Remove Developer-Stains from the Hands, use a crystal of citric acid dipped in water. If not too badly stained, use lemon- or tomato-juice. Persulfate of ammonia will remove all trace of stain. To avoid stains, either use rubber finger tips or else rub the hands with a little lanoline or vaseline before beginning developing.

LEMUEL DUTTON.—Though the Eikonogen Has Turned Yellow, that change does not signify that it has lost its developing-power. When fresh, the powder is a pale yellow, but it discolors and turns dark (oxidizes) if exposed long to the air. If very dark, it might stain the plate and so should be used with discretion.

ANN F. O.—To Clean Your Spoiled Negatives you do not need any chemical. Make a strong soapuds in hot water, place the plates in it and the gelatine will melt and slough off. Simply running hot water on the plates will remove the gelatine unless the plates are too old. If they are, it simply means a longer soaking in the hot suds. Wash well after the gelatine is removed, rinse, and polish with French chalk and tissue-paper.

BEN. DENNIS.—Covers for Trays to use during developing may be made of cigar-boxes by screwing on a small porcelain knob for a handle. Pasteboard may be used, but it is likely to warp after using, whereas the little light wooden covers last indefinitely. **The Staining of Your Negative** was doubtless due to old hypo. Hypo after use becomes brown from the silver salts dissolved in it and should then be thrown away. In fact, hypo is so cheap that it is wiser to use fresh each time of developing. The acid hypo-baths keep longer and can be used over again several times.

ARTHUR LOTON.—To Calculate the Factor of a Developer, note the number of seconds the highlights take to appear, and then the number of seconds required to complete development. Divide the latter number of seconds by the former and it will give the factor for that particular developer. The list of factors for different developing agents has been published several times in this department.

RHODA G. F.—Doubtless the Magic Photograph about which you ask is a print bleached in mercuric chloride and then restored by hypo. To make one, take the ordinary print made on printing-out paper and instead of toning it wash it and fix it in hypo, then place it in a saturated solution of bichloride of mercury till the image disappears or is bleached out. To make

this image appear again, soak a sheet of blotting-paper in a saturated solution of hypo and dry it; then, when dry, moisten it slightly, place the print face down on the paper and in a few moments the print will appear as bright as when made.

S. S. HAYES.—A Double-Pose Photograph is a picture in which the same person is represented twice. To make one of these pictures one may have an attachment called a duplicator, which is placed over the lens like a cap and which shields half of the plate while the other is being exposed. The attachment is then reversed and the other side of the plate exposed. One may make very ingenious pictures by this device; for instance, a picture on one half the plate of a subject in the act of taking a picture, and on the other half the same person sitting for his picture, so that in the finished print he looks as if he were either photographing himself or his double. The duplicator may be turned so that the image is thrown on the plate at any point desired. A duplicator 2 inches in diameter usually costs only 30 cents.

Print-Criticism

Address all prints for criticism, enclosing return postage at the rate of one cent for each two ounces or fraction thereof, to ELIZABETH FLINT WADE, 743 East 27th St., Paterson, N. J. Prints must bear the maker's name and address, and should be accompanied by a letter, sent separately, giving full particulars of date, light, plate or film, stop, exposure, developer and printing-process.

SOLID COMFORT. C. C. B.—The subject of this picture is a man sitting on a sloping bank, fishing. He is posed with his back to the spectator, and a huge tree, whose branches start near the ground spreads out over the stream and makes a frame not only for the vista of the stream but for the fisherman as well. The point of view was admirably chosen to make such a clever use of the tree. To emphasize the subject more effectively, an open book turned face down on the grass lies beside the fisherman, while a luncheon-basket in close proximity awaits the pleasure of the wanderer. In this picture there is very little to criticize adversely. The one thing which the amateur seems so often to forget is the suitable printing and mounting. Now, the mount either detracts from or enhances the merit of a print, and many a time and oft the subject of suitable mounting has been discussed in these pages. Either he who runs does not read, or else he runs so fast he cannot read, and so loses the benefit of the experience of those versed in the right ways of photography. This print is toned in red and mounted on a gray mount, the red tone not being inappropriate for a decorative print, but entirely out of keeping for such a picture as the one described. This picture, printed in gray and mounted on a deeper gray mount, would be worthy a place in anyone's collection of interesting and artistic pictures.

SOLITAIRE. F. D. S.—This is a picture of a little girl sitting in a doorway playing with a solitaire-board of marbles. The figure is very well posed, the child holding a marble between her fingers and intent on studying where to place it, but the amateur has brought so many objects into the field of the lens that the picture is quite spoiled. For instance, the steps at the side are filled with blossoming plants so evidently brought forward for this day and date only that one cannot help but mark their incongruity. Then, too, the child's hat lies on the step at her feet together with a book, a doll, and a ball. If all these objects had been removed and

the little girl allowed to have the whole interest of the scene directed to herself this would be a very pleasing picture. The finish and mounting of the print are good, and the technique of the negative was excellent.

THROUGH LEAFY WAYS. L. O. R.—This is a picture which, as the title indicates, shows a vista down a woodland path. The point of view has been well chosen, and the lights and shadows are well managed; but the trimming of the picture has almost destroyed its artistic merit. In the foreground at the left is a line of fence partly concealed by weeds and small bushes; the posts, however, rise above the tangle so as to make straight lines which in themselves are not unpleasing, but the print has been trimmed in circular shape and the straight lines of the print, and the circle of the outline clash so that they force themselves on one's observation to the detriment of the real merit of the picture. This print should be trimmed with straight lines to conform to the lines in the picture itself. When there are curves, one may use a circular form of cutout, but otherwise it is better to stick to the line which harmonizes with the line of the picture. This picture might be entered in our August competition of "Wood-Interiors" and might get honorable mention if not a prize, provided the print were trimmed suitably.

A WELLSPRING. B. A. E.—The subject of this picture is a rollicking baby, and the amateur has entitled it "Wellspring," from the well-known lines, "A baby in

the house is a wellspring of pleasure." The baby is half-lying, half-sitting on a pile of cushions, its little hands reaching up for some object out of sight of the spectator, but which is evidently something very much desired judging by the expression on the interested face. This picture is excellent in technique and is a fine picture of the baby. The criticism is regarding the background and the cushions, which are so many-flowered that they make an "uneasy" looking picture, for one looks involuntarily at the designs on the fabrics before directing his attention to the "wellspring." It seems a pity that so good a picture should lack artistic merit, and in this case the amateur can very easily block out the background and tone down the figures on the sofa-pillows by working on the negative to bring up the shadows or dark places to the tone of the foundation or lighter parts. Or get a negative-marking pencil, which may be bought at any large shop.



"I AM pleased to have won Honorable Mention in the 'Copying Works of Art' competition. Much of the progress which I feel I have made lately in photography I owe to the helpful criticism and encouragement from the Round Robin Guild and the excellent articles contained in PHOTO-ERA.

"Very truly yours,
" (Miss) I. ROBINSON."

Plate-Speeds for Exposure-Guide on Opposite Page

Class 1/3

Lumière Sigma

Class 1/2

Barnet Super-Speed Ortho
Ilford Monarch
Seed Gilt Edge 30

Class 3/4

Barnet Red Seal
Ilford Zenith
Imperial Flashlight
Eastman Speed-Film
Wellington 'Xtra Speedy

Class 1

American
Anso Film, N. C. and Vidil
Barnet Extra Rapid
Barnet Ortho Extra Rapid
Barnet Studio
Cramer Crown
Defender Ortho
Defender Ortho, N.-II.
Defender Vulcan
Ensign Film
Hammer Special Extra Fast
Imperial Special Sensitive
Imperial Non-Filter
Imperial Orthochrome Special Sensitive
Kodak N. C. Film
Kodoid
Lumière Film
Magnet
Premo Film Pack
Seed Gilt Edge 27

Seed Color-Value
Standard Imperial Portrait
Standard Polychrome
Stanley Regular
Wellington Anti-Screen
Wellington Film
Wellington Speedy
Wellington Iso Speedy

Class 1 1/4

Cramer Banner X
Cramer Instantaneous Iso
Cramer Isonon
Cramer Spectrum
Eastman Extra Rapid
Hammer Extra Fast
Hammer Extra Fast Ortho
Hammer Non-Halation
Hammer Non-Halation Ortho
Seed 26x
Seed C. Ortho
Seed L. Ortho
Seed Non-Halation
Seed Non-Halation Ortho
Standard Extra
Standard Orthonon

Class 1 1/2

Cramer Anchor
Lumière Ortho A
Lumière Ortho B

Class 2

Cramer Medium Iso
Ilford Rapid Chromatic
Ilford Special Rapid
Imperial Special Rapid
Lumière Pauchro C

Class 2 1/2

Barnet Medium
Barnet Ortho Medium
Hammer Fast
Seed 23

Class 3

Wellington Landscape

Class 4

Stanley Commercial
Ilford Chromatic
Ilford Emipress
Cramer Trichromatic

Class 5

Cramer Commercial
Hammer Slow
Hammer Slow Ortho
Wellington Ortho Process

Class 8

Cramer Slow Iso
Cramer Slow Iso Non-Halation
Ilford Ordinary

Class 12

Cramer Contrast
Ilford Half-tone
Seed Process

Class 100

Lumière Autochrome

Exposure-Guide for July

COMPILED BY MALCOLM DEAN MILLER, A.B., M.D.

Exposure for average landscapes with light foreground; river-scenes; figure-studies in the open; light-colored buildings and monuments; wet street-scenes, with stop F/8 (U. S. No. 4) on Class 1 plates.

For other stops multiply by the number in third column.

Hour	Bright Sun	Cloudy-Bright	Cloudy	Dull	Very Dull			
9 A.M. to 3 P.M.	1/50	1/25	1/12	1/6	1/3	F/4	U. S. 1	× 1/4
8 A.M. and 4 P.M.	1/32	1/16	1/8	1/4	1/2	F/5.6	U. S. 2	× 1/2
7 A.M. and 5 P.M.	1/25	1/12	1/6	1/3	2/3	F/6.3	U. S. 2.4	× 5/8
6 A.M. and 6 P.M.	1/16	1/8	1/4	1/2	1	F/7	U. S. 3	× 3/4
5 A.M. and 7 P.M.	1/8	1/4	1/2	1	2	F/11	U. S. 8	× 2
The exposures given are intended merely as a basis for trial, and will vary with latitude and other conditions, but they should give full detail in the shadows, except when iso. or ortho. plates are used without a screen, when the exposure should be doubled, unless the light itself is yellow, as is the case early or late in the day.						F/16	U. S. 16	× 4
						F/22	U. S. 32	× 8
						F/32	U. S. 64	× 16

SUBJECTS. For other subjects, multiply the exposure for average landscape by the number given for the class of subject.

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| <p>1/8 Studies of sky and white clouds.</p> <p>1/4 Open views of sea and sky; very distant landscapes; studies of rather heavy clouds; sunset and sunrise studies.</p> <p>1/2 Open landscapes without foreground; open beach, harbor and shipping-scenes; yachts under sail; very light-colored objects; studies of dark clouds; snow-scenes with no dark objects; most tele-photo subjects outdoors; wooded hills not far distant from lens.</p> <p>2 Landscapes with medium foreground; landscapes in fog or mist; buildings showing both sunny and shady sides; well-lighted street-scenes; persons, animals and moving objects at least thirty feet away from the camera.</p> | <p>4 Landscapes with heavy foreground; buildings or trees occupying most of the picture; brook-scenes with heavy foliage; shipping about the docks; red brick buildings and other dark objects; groups outdoors in the shade.</p> <p>8 Portraits outdoors in the shade; very dark near objects, particularly when the image of the object nearly fills the plate and full shadow-detail is required.</p> <p>16 Badly-lighted river-banks, ravines, glades and under the trees.</p> <p>32 Wood-interiors not open to sky and with dark soil or pine-needles.</p> <p>48 Average indoor portraits in well-lighted room, light surroundings, big window and white reflector.</p> |
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PLATES. When plates other than those in Class I are used, the exposure indicated above must be multiplied by the number given at the head of the class of plates.

THE CRUCIBLE

A MONTHLY DIGEST OF FACTS FOR PRACTICAL WORKERS

With Reviews of Foreign Progress and Investigation

Conducted by MALCOLM DEAN MILLER, A.B., M.D.

Readers are encouraged to contribute their favorite methods for publication in this department

Address all such communications to The Crucible, PHOTO-ERA, 383 Boylston Street, Boston

Darkroom-Dodges for Hot Weather

WITH the opening of the summer comes a whole batch of troubles from which we have been free for months. Those fortunate workers who have darkrooms so situated that they remain at a reasonably low temperature on hot days have things simplified, for their main troubles come from the warmth of the water-supply—a heat of 80° not being uncommon for the city-water in most towns. By utilizing the cooler hours of the evening and providing a little ice or an electric fan, they can get along with comfort. But most workers are not able to enjoy the luxury of a fan, either electric or water-power, and must get along in hot rooms. For them, we suggest the following helps.

Evaporation is a cooling-process, hence if the stock-bottles are sewn up in flannel and set in a trayful of water in a place where a current of air passes over them, they will be several degrees cooler than the surrounding atmosphere. Water for diluting the stock may be iced before beginning work, or, in the absence of ice, may be cooled by drawing a large jugful and putting it on the cellar-bottom until required for use. The use of freezing-mixtures, of which many formulas may be found in the *Annals*, is often recommended; but I have found them more trouble than they are worth. Besides, the intense cold they produce is quickly wasted and everything in the darkroom soon comes to the same temperature. Ventilation of the room itself in such a manner as to allow the hot air to escape at the top through a light-trapped flue while cool air enters along the floor, is a better remedy. In fact, given a moderately hot room with all the solutions at a uniform temperature, and troubles will be less likely than if one of the baths is cold and the rest warm.

It is this matter of uneven temperature which plays tricks with the gelatine of the plate. Some brands are noted for their ability to withstand frilling; but it is not to be expected that a plate can be transferred without danger from a developer at, say, 75° to a fixing-bath freshly-dissolved and not over 45°. There is much less danger in the use of both solutions at room-temperature, provided the fixer is acid and not too concentrated. I remember the case of a prominent and expert technician who came to Boston during the hot weather and, in the absence of facilities of his own, developed his plates in a friend's darkroom, using a package of an acid-fixer which was new to him. It proved too strong for his plates and blistered them beyond any chance of recovery.

Water plays another prominent part in summer work. Unless one modifies the formula by reducing the amount of alkali, it is necessary to dilute the developer more than for winter use. This procedure prevents the blocking-up of the highlights before the shadow-detail is out. Double or even triple the usual amount of water should be used for isochromatic plates which tend to produce heavy contrasts.

The *Lumières* have pointed out, in the paper re-

printed in this issue, the advantages of special formulas for hot-weather use. Those who have unusually adverse conditions to contend with are advised to follow their suggestions.

For those who are not so badly off, the matter may be summarized thus:

Keep all solutions at a uniform temperature, as low as possible;

Use a developer without alkali (Amidol) or reduce the amount of carbonate in their regular formula;

Make sure that the fixing-bath does not become too concentrated by evaporation;

Fix for from thirty minutes to an hour to secure perfect hardening of the gelatine and prevent frilling in the final washing; handle the plate as little as possible.

An Unexpected Cause of Foggy Negatives

A WELL-KNOWN scientist, writes Mr. Jas. A. Sinclair in *The Sinclair Sign-Post*, called on us and said he was much worried because he could not get negatives with the crisp detail which formerly characterized his work. His lens and apparatus were by one of the leading makers. So unsatisfactory were his results that he had insisted that his lens must differ in quality from one of the same make used previously, and the makers changed it for another. His negatives were still below the perfection of technical excellence so necessary for his profession.

We suggested that he should bring us the lens and also the camera. The latter was examined and found perfectly light-tight. We then set up the camera on a stand and placed by its side one of our own cameras, fitted with a lens identical in make and focus with the supposed defective one. Focusing both cameras on an object across the road and examining the images with a magnifier, there was undoubtedly a puzzling difference in quality; that given by our lens being rich and brilliant, and that by our client's lens decidedly grey and undecided. We then suggested transferring the lenses, placing our customer's lens on our camera and our lens on his camera. Now, strange to say, what was supposed to be the bad lens gave the better image when on our camera, and our lens when on the other camera gave the foggy one. Removing the ground-glass focusing-screen, the cause was soon apparent. Our customer's camera, excellent as it was in workmanship, had a very conical bellows for the sake of portability, and the lens, being a modern anastigmat, naturally covered a larger field of view than that shown on the plate, and consequently the edge of every fold in the bellows was brilliantly illuminated. Unfortunately, the angle formed by this line of bellows was such that the light was directly reflected on the sensitive plate itself. In the case of our camera, the bellows, being nearly square, was at such an angle that any excess of light was not reflected on the plate, and consequently a richer and more brilliant image was the result. We have never had a case previously which so conclusively showed the trouble that may occur with any of the modern types of cameras in which efficiency is sacrificed to save a few inches in cubic capacity.

BOOK-REVIEWS

Books reviewed in this magazine, or any others our readers may desire, will be furnished by us at the lowest market-prices.

THE ARTISTIC SIDE OF PHOTOGRAPHY — IN THEORY AND PRACTICE. By A. J. Anderson. Large octavo. 360 pp. Illustrations in photogravure and half tone. Price, cloth, \$4.00 net. New York: Dodd, Mead and Company, 1911.

An inspiring and grateful theme, approached and treated gingerly by certain writers — professional art-instructors — but, in this instance, handled with courage, conviction and success by a trained craftsman and born elucidator. The author has preached sound, practical doctrine in his "Letters to Monica," a department in the popular English periodical, *The Amateur Photographer*, for some years. He prefaces his treatise with a slap at the art-critics — those who deny to photography any artistic claim — using as his weapon a quotation from the writings of Leonardo da Vinci: "You have set painting amongst the mechanical arts! Truly, were painters as readily equipped, as you are, to praise their own work in writing, I doubt whether it would endure the reproach of so vile a name." Only Mr. Anderson has substituted "photography" for painting, and sarcastically adds that, whereas the sixteenth century critics reproachfully termed painting "mechanical," because it was "done with the hand," possibly photography has hitherto failed to earn its status as a fine art, because so much of it has been "done with the hand." Conversant with photographic working-methods and achievements from the days of D. O. Hill to the present time, Mr. Anderson arrives at the conclusion that pictorial photography has not progressed materially since 1843 and that further advance lies with A. L. Coburn, Baron de Meyer, W. H. Evans, Will Cadby and the Photo-Secession. Why he ignores the work of Continental masters, other than Demachy, and that of the independent American pictorialists, is not apparent. But even with this serious omission Mr. Anderson has written a strong and interesting book. He offers abundant instruction how to make real pictures, and has arranged this material in twenty-eight chapters, distributed among the following divisions: The Medium of Photography; Some Artistic Principles of Photography; Working in Tone; The Choice and Treatment of the Subject; Some Practical Suggestions on Photography.

The illustrations, twenty-four in number, are well done, the photogravures in particular. The original prints are by D. O. Hill, A. L. Coburn, Will Cadby, R. Demachy, W. Benington, Gertrude Kaesebier, Alfred Stieglitz, Malcolm Arbuthnot, Geo. H. Seely, Clarence H. White, F. H. Day, Alexander Keighley, Charles Job, Guido Rey, E. J. Steichen, William Babcock, F. J. Mortimer, A. de Meyer and F. H. Evans.

Those who aspire to become pictorialists and lack neither ability nor perseverance will derive great moral and practical benefit from this veritable fountain of knowledge. The professional photographer should have this volume on his table, for the perusal of even one chapter will be temptation to read more, until he shall know its precepts by heart and shall have tried to apply them with intelligence and enthusiasm.

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"Of all the photographic publications that I take I find PHOTO-ERA worth all the rest, and then place it at the head. M. C. LANG."

GEORGE THORNE. A novel. By Norval Richardson. Price, \$1.25 net. Boston: L. C. Page and Company.

By the author of "The Lead of Honor," and written in the same clear and fluent style, this delightful story will make many friends. Most of the story is laid in New York, then comes a journey across the ocean and back again. The characters are well drawn, and, when their activity in the story ceases, the reader cannot repress a desire to continue their acquaintance and look more deeply into their lives. The tone of the book is wholesome and the scenes are sketched by a master-hand. The interest never lags and the perusal of the volume will surely repay the overworked camerist in quest of profitable diversion.

ABROAD WITH THE FLETCHERS. By Jane Felton Sampson. Illustrated with photographs by the author. Price, \$1.60 net. Boston: L. C. Page and Company, 1911.

The latest addition to the Little Pilgrimages Series, issued by the Pages, is the description of a European tour by Jane Felton Sampson. In order to make her story the more attractive, the author has included in the characters — forming the party — Thomas Jeremiah Fletcher, a retired, wealthy American farmer, and his wife, whose loquacious propensity, droll remarks and pardonable locutions (à la David Harum) furnish the element of humor. Among the countries visited are the Azores, Italy, Germany, Holland, Switzerland, Belgium, France and England. The narrative is in an agreeable, conversational style and, in addition to short, clear and accurate accounts of the various objects of interest seen on the journey, there are felicitous historical references — all of which make the perusal of the book a real pleasure.

William H. Kunz

DESIRING a wider field for his remarkably accurate and beautiful color-photographs, Mr. Kunz has recently severed his connection with a Boston publishing-house and intends hereafter to work as a free lance. He has removed with his complete and valuable equipment to the old-established studio of A. Marshall, 16 Arlington Street, Boston, where he is prepared to make three-color portraits from life and to execute orders for cover-designs, book-illustrations and other work in the true colors of nature. Probably the most important feature of Mr. Kunz's work is the cheapening of the cost of the halftone blocks by doing away with most of the re-etching. So perfectly has he adjusted the ink to his separation-negatives that he usually obtains accurate results with a flat etch.

Mr. Kunz's ability as a pictorialist is well known to our readers. We are glad to state that he will not give up working in monochrome, but will continue to make artistic landscapes and portraits in carbon, oil, and bromoil, as well as three-color carbons and collotypes on paper.

A Business for the Right Man

We have frequently heard expressions of desire from amateur practitioners for a good business-opening. Many of them complain of the lack of opportunity. Here is a fine one; but only for him who has practical experience, business acumen and an energetic spirit. With the desire to produce first-class results, and to satisfy customers, the right man will prosper, for the place is all that is represented to be by the present owner, who has a reputation for producing high-class commercial work, and parts with it for plausible reasons. Advertisement in this issue.

LONDON LETTER

E. O. HOPPÉ, F. R. P. S.

MAY has brought us three important events: the expositions of The Royal Photographic Society, the one organized by the newly-founded London Secession — to which I referred in my May letter — and the Arts and Crafts Exhibition with the second Congress of the Professional Photographers' Association. Each of the three shows attracted considerable attention, and I propose to deal with them at some length, making the two last-named expositions the subject of this present letter and referring to the Royal show (with suitable illustrations) in the following.

While the exposition of the London Secession formed undoubtedly the high-water mark in present-day Pictorial Photography, the Arts and Crafts Exhibition appealed almost exclusively to the professional worker. Apart from the exhaustive display of the novelties of the photographic trade, which were of particular interest to the professional man, the outstanding features of the occasion were the many admirable lectures and demonstrations given. Of these, the following deserved to be recorded in some permanent form: Pirie McDonald (New York) on the "Photography of Men," William Crooke (Edinburgh) "Impressions of American Professional Photographers," Drinkwater Butt (London) on "The Studio, its construction and decoration" — a most instructive lantern-lecture with many slides of photographs of studios possessing unconventional decorative or notable constructive features — and last but by no means least, the noteworthy address delivered by the president of the association, Mr. F. P. Moffat (Edinburgh), a gentleman whose name is closely associated in this country with the most excellent and refreshing work. On three afternoons the members of the association were the guests of the Kodak Company, Messrs. Houghtons and The Platinotype Company. A most enjoyable time was spent in visiting the works of the three big firms.

This second Congress was without doubt an enormous success and will, I hope, become an established annual event.

At the first exposition of the London Secession fifty-one pictures by seventeen workers were shown. They were all uniformly framed and arranged in one single line against a background of dark brown paper. The general effect was distinctly pleasing and harmonious.

The members of the London Secession are: Craig Annan, Malcolm Arbuthnot, Walter Benington, Eustace Calland, Alvin Langdon Coburn, Archibald Cochrane, George Davison, J. Dudley Johnston, Baron A. de Meyer, Frank H. Read and the invited exhibitors: Mrs. Annie W. Briggman, Frank Eugene Smith, Mrs. Kaesebier, Eduard J. Steichen, Alfred Stieglitz, Clarence H. White and Heinrich Kühn. The catalog of the exposition was prefaced by the following historical notice:

"In the year 1892 a number of photographers intent upon realizing the best possibilities of their medium, formed the Society called The Linked Ring, and held a Photographic Salon annually for seventeen years.

"To these exhibitions, and to the efforts of similar successful organizations and workers in America, France, and Germany, must be mainly attributed the present extensive use of photography in the production of interesting and original pictures.

"Recently it became apparent that a considerable section of this Society, in its desire to make the salons what it termed 'widely representative,' was in reality championing the mediocre and the commonplace.

"Consequently, The London Secession has been organized, with the object to hold periodical displays of only the most original, interesting, and progressive work available.

"In this, the first exhibition, it is hoped that a measure of the organizers' aims has been achieved."

There cannot be the least doubt that in this small exposition the organizers' aim has been fully achieved. It was undeniably a most admirable show, and the work (with the exception of about six pictures) was "original, interesting and progressive."

Dudley Johnston's "Lake of Lecco" is easily first; it is a guni-platinum print of rare quality. Cochrane's two gum-prints in blue and one in yellow do not leave any lasting impression. Kuehn's "Still Life," a masterly-treated gum-print, is one of the finest things in the show. The play of light on cups and saucers is of exquisite beauty. Calland's "Country House" is full of real sun and his "Queen Anne's Mansions" broad and vigorous in its treatment. Each of the three pictures by Frank H. Read is a gem. "The Banyard" is a highly-decorative print of remarkably fine tone-rendering. The same must be said for "Repairing Winchester Cathedral" and "Central Buildings, Westminster." Clarence H. White's "Nude in the Wood" is full of harmony and light and is the best poetical rendering of the nude I have ever seen attempted by photography. Aman's "Miss Dacre" is equal to his best traditions. Frank Eugene Smith's "Dawn" — a little nude boy looking with wondering eyes, is beautiful in its simplicity and charm. Of Arbuthnot's pictures, "Afternoon Tea" is delightfully fresh and unconventional and his "Roses" is full of delicate tones. "The Child at the Window" is a new venture for Benington. The tones are not altogether pleasing, but it is quite a fascinating picture nevertheless. Baron de Meyer's three "Studies from the East," and Steichen's impressive portraits of "Dr. Richard Strauss" and "G. Bernard Shaw" are very powerful works of supreme quality.

BERLIN LETTER

MAX A. R. BRÜNNER

In the sphere of the German photographic clubs, an event has recently taken place which means something like a revolution among the Berlin amateur photographers. Our two largest clubs, The German Society of Friends of Photography and The Society for Furthering Photography, with headquarters in the capital, have amalgamated. The new club now assumes the first place of all photographic societies in the Fatherland as regards number of members and, owing to its good finances, has been placed in a position to further the artistic and scientific efforts of amateur photography in an unexcelled way. Through this combination, besides, a photographic library has come into existence which is without counterpart in the empire and perhaps in the world. This library will now be placed at the disposal of the members living out of town. Curiously enough, these two clubs were founded by the same person, the famous Professor Vogel, whose handbooks on photography are known everywhere and have been translated into several foreign languages. The last-named club was founded, as early as 1869, for professionals, but in the course of years amateurs were also admitted until at last these outnumbered the professional members. In 1887 Mr. Vogel founded the other club, The German Society of Friends of Photography, which was the first strictly amateur club in Germany. In 1912 it would

have celebrated its 25th anniversary, but instead, the new combined club will celebrate that day by another festival. The two clubs once before came into close relations when, 22 years ago, they organized an International Photographic Jubilee Exhibition in the Royal Academy of War. That undertaking excited much interest among all cultured classes, as for the first time the application and immense usefulness of photography for art and science were exhaustively demonstrated. From that time the Academy of War was the home of one of these clubs until this year, and this will be the case also with the new amalgamated society.

We are now right in the summer-season and the passion for traveling is at its height. There are many tourists who avoid the beaten path and prefer visiting the more out-of-the-way countries. One of the most prominent mountain-photographers in Germany, Dr. Kuhphal, has just returned from a trip to the Caucasus in Southern Russia and told his impressions in a lecture attended by the writer. The lecturer used two plate-cameras of box form, 9 x 12 cm. (nearly 4 x 5) and two apparatus for roll-films 10 x 15 cm. (4 x 5). The entire outfit, consisting of adapters, plate- and film-holders, lenses, shutters, screens, tripods and carrying-cases, was so arranged that each article fitted all four cameras—an important point. These and the stock of plates were stored in a strong basket lined inside with waxed cloth and weighing 40 pounds. The basket again was carried in two watertight bags. The elastic wicker-work protected the contents so well that nothing was destroyed even after an animal carrying it fell down a slope. Dr. Kuhphal employed both medium and special rapid orthochromatic plates, also flat- and roll-films, altogether 60 dozen, well packed in tin boxes. It is not sufficient to protect the used and fresh plates alone against the detrimental influence of atmospheric moisture which prevails in these regions by keeping them in soldered tin boxes, but the camera itself and those plates or films which you have just put into the holders must be shielded in some way, at least during the night, for instance by putting them into watertight bags of batiste or waxed cloth. In spite of this precaution, some of our friend's negatives were spoiled by damp. Curiously, the roll-films gave the best satisfaction, probably on account of their tight winding, which prevented the penetration of moisture. The same experience is reported by the mountain-photographer, Mr. Vittorio Sella, who joined the Arctic expedition to Mount St. Elias in Alaska, where all flat films were spoiled. The light-conditions of the Caucasus are about the same as in the Alps, and the character of the high regions, as regards photographic reproduction, is the same as that of other glacier-mountains. These remarks will be useful to Americans, who are known as enthusiastic travelers, and who scarcely know a limit for their tours; the hints apply not only to tourists going to the Caucasus, but to any similar rough mountainous district.

In another way photography will become a help for travelers. At the International Geographical Congress, in 1908, it was resolved to produce a photographic atlas of our globe. To secure a financial basis for this remarkable undertaking, Professor Chaix, of Geneva, who is the originator of the idea, has sent circulars to all geographical and geological societies, institutes, museums, etc., inviting them to subscribe. It is intended to produce an atlas showing the surface of the whole earth with all its characteristic features, the work to consist of 500 to 600 photographic prints, designed chiefly for study in schools. It is planned to sell each print for 10 cents if one subscribes for at least 100 at a time, or for 20 cents if one buys single photographs. It took a long time before the financial backing was se-

cured, which recently was the case, however; and the work will now be started.

That the camera is the inseparable companion of people traveling abroad is again proved by the German Crown Prince, who has just returned from his six months' tour to India, Ceylon, Egypt and other Eastern countries. Of course he, as well as the young Crown Princess, did not hesitate to take along pocket cameras, which they freely used, although several professional photographers constantly accompanied the royal party. The prince took a few hundred snapshots which will now be published in a neat little souvenir-album. Besides, lantern-slides are being made from these photographs and these will be shown in an illustrated lecture in Berlin's finest motion-picture theater, the "Lichtspiele" in the Mozart Hall, in the presence of the royal photographer. Later they will be shown to the public in other theaters. The receipts both from selling the album and from the performances will be turned over to the invalid-fund of our South African colonies.

Speaking of cinematographic theaters, I may mention that a congress was recently held here to utilize motion-pictures for educational purposes. The school authorities sent delegates from all quarters of the empire, from Saxony, Bavaria, Hesse, the Rhine, Hamburg, etc. These pedagogues complained without exception that it is difficult to secure really good films for instructive and educational purposes, and that the pictures we usually see in the hundreds of theaters represent criminal cases, or indecent and sensational scenes which should be avoided. Numerous proposals were made at the meeting, among which may be mentioned the intention to found a limited company like the famous Berlin "Urania" (a scientific theater) with a film-factory of its own, where only valuable photographs of the life of animals, plants, industry, art and science shall be produced. It was also proposed to found an institute which should rent such films to the private theaters. In addition, stricter laws for censorship of films by the police were demanded. The first practical result of this important congress was the foundation of the Deutsche Gesellschaft für Lebensbilder (German Society for Pictures from Life). Such an undertaking, with the concomitant proposals, is still more important for the United States. The writer visited many motion-picture theaters in some large American cities and was disgusted by the vulgar scenes of robbing, killing, terrible disasters, etc., which were mostly applauded by the audience—a state of things which reflects upon the taste and education of the public. Without the revolver and the almighty dollar, scarcely a film or a play is imaginable in America, and if such scenes are shown in Germany the originals were taken in the United States.

The motion-picture film seems now to become a competitor to the ordinary photograph, even to the portrait, for in Berlin a company has come into existence which takes in its studio or, if you prefer, in a garden or at your home or office, motion-pictures of anybody who will pay for them. The customers, either a single person, or a group of people, fix the number of snapshots, i.e., the length of the film, also the surroundings and other details, and are then photographed by a cinematographic apparatus, either walking or playing, riding, driving or working. From the original, another film ready for projection is made and remains the property of the customer. The latter may then show it at social parties and the like. In the Berlin "Luna Park," which is modeled upon that in Coney Island, there is a branch of the company mentioned above, and visitors can have their motion-pictures taken while they wait. Already a considerable patronage has developed, and the promoters are doing well, financially.

OUR ILLUSTRATIONS

Edited by WILFRED A. FRENCH

WILLIAM H. PHILLIPS, whose series of Spanish views was exhibited by the Boston Camera Club recently, and evoked much favorable comment, furnished the subject for our cover-design this month. Mr. Phillips has a penchant for pictures with a spacious foreground, and generally manages to make this style of composition forceful, convincing and attractive. In these and other respects, "Reflections" is eminently successful. The picture was awarded the first prize in one of PHOTO-ERA's regular contests, "Reflections," January, 1906.

The plate of the frontispiece—one of William Norrie's masterpieces—hardly suggests the beautiful bluish-gray tone of the original print with its superb, true values, a distinctive feature of the artist's marine-impressions. Data: September, 9.30 A.M.; Goerz Dagor; F/6.8; stop F/8; $\frac{1}{100}$ second. Other references to Mr. Norrie's work are given below.

James Paris, some of whose interesting photographic records of a visit to Scotland are presented on pages 4, 6 and 8, died last March, at La Crosse, Wis. In renewing his subscription to PHOTO-ERA, last autumn, he sent us fifty prints of Scottish scenery made by him during the summer of 1909, also a sketch of the trip. Their publication was deferred until a summer month when the travel-season was on. Although their appearance was pleasurably anticipated by the author, he was not privileged to see them reproduced. We sincerely hope that they would have met his approval. Mr. Paris was a stickler for sharply-focused photographs, but knew how to obtain a favorable and telling aspect of the scene he wished to record. General data will be found in the article, although in a letter he has stated that he used the lens at F/16, $\frac{1}{5}$ second; flipbacks, developed after return home.

"Along Shore—Nonak," by William S. Davis, page 10, is an example of this artist's admirable work frequently shown and described in these pages. Mr. Davis is an advocate of moderate exposures in high-speed work, particularly in marine-photography. In this manner he succeeds in conveying a better sense of movement than those practitioners who use their shutter at excessively high speed, thus arresting motion instead of interpreting it. Data: near noon, August; good light; $6\frac{1}{2}$ -inch single achromatic lens; stop, F/11; $\frac{1}{50}$ second; $3\frac{1}{4}$ x $4\frac{1}{2}$ Cramer Inst. Iso plate (backed); Edinol-Hydro.

"Evening Glow," page 11, is also by William S. Davis. Data: April, 6.15 P.M.; sun in haze; $7\frac{1}{2}$ -inch R. R. Lens; stop, F/8; 1 second; Ideal ray-filter; 4 x 5 Inst. Iso plate (backed).

"Flying Spray," page 11, like the first picture of this series, was made with the shutter at low speed and successfully gives the impression desired by the artist. Data: October, 4.30 P.M.; spray partly illuminated by sunshine; R. R. Lens; stop, F/8; $\frac{1}{50}$ second; Inst. Iso plate. Prints furnished by Mr. Davis for reproduction were made on Argo Special Velours surface.

The picture of "The Racing Yachts," page 12, was made by N. L. Stebbins, a competent and prosperous commercial photographer who has built up a high reputation based on technically-admirable work. No data.

The seascapes and water-craft of William Norrie, the celebrated Scottish marine-photographer, are always welcome in our pages. See frontispiece, also pages 13, 14 and 17. Fraserburgh, his native town on the east coast of Scotland, might never have been known, geo-

graphically, to American practitioners, but for its beautiful shore, water and sky which have been made so generally known through the rare artistry of this, its premier photographer. Mr. Norrie's sense of beauty is highly developed, and he delights to depict the varying moods of the sea as they appeal to him in their soft, tender tones and gradations. Through his chloride of silver prints of rare delicacy and beauty, this artist conveys, in a delightful manner, the charm of atmosphere and perspective of the Scottish sea and sky. PHOTO-ERA for October, 1908, contained a most admirable illustrated article on Mr. Norrie and his work written by his friend and countryman, William Findlay. Data: "The Maid of the Pool"—page 14; August, 8.15 A.M.; at the sea-side; Goerz Dagor; stop F/22; 2 seconds. "The Conley Sea," p. 17; October, 9.30 A.M.; $\frac{1}{25}$ sec.

Among the most excellent animal-pictures made in what many call the early days of amateur-photography—about twenty-five years ago—is a group of setter pups, made by Jean Grosvenor, page 16. As a caller said to the editor not long ago: "They're not bearing that now, as true as you live!" We thought so too, so sent the still fresh-looking albumen print to the engraver. Data: Voigtlander & Son's Euryscope, No. 1 A; $11\frac{1}{2}$ -inch focus, F/8; $6\frac{1}{2}$ x $8\frac{1}{2}$ Cramer plate; $\frac{1}{5}$ second; pyro; direct print on albumen paper.

Yachtsmen will doubtless be interested in the marine on page 17, which is a souvenir of Mr. Peabody's visit to Lower Egypt. Data: 4.45 P.M.; bright light; B. & L. R. R. lens; $6\frac{1}{2}$ -inch focus; stop F/11; $\frac{1}{100}$ second; Eastman N. C. film; pyro; Royal Bromide 6 x 10.

The Village Street-Scenes, page 19, are by one of Germany's most capable portrait-photographers, most of whom take a hand-camera on their summer-outings and invariably bring back some artistic bits—typical views of scenery or peasant-life, as shown by Otto Scharf.

The group-portrait is admittedly the most serious problem in portraiture. If made by artificial illumination, and particularly by flashlight, it presents peculiar difficulties. Germans, being eminently patient and methodical, seem to excel in this particular form of expression. Note the examples by Perscheid and Duerhkoop, published in previous issues of PHOTO-ERA.

Wilhelm Weimer, another notable "Lichtbildner," attained his end by means of a simulated task which imparts to the group an element of concerted interest. All are earnestly engrossed in solving the problem. In all truth it is a genre; but in this guise the artist often obtains more felicitous results than by posing his subjects conventionally. The arrangement is original, easy and effective; the balance is perfect without being studied; the flesh-tones are true in value, and the gradations throughout are managed with great skill. No data.

"Abends in der Küche" (Evening in the Kitchen), page 21, by Albert Gottheil, is more truly a genre. A clever piece of work, done by the aid of lamplight. As a domestic scene, it is pleasing to contemplate, particularly as the head of the family seems to be enjoying the evening fully as much as though he were in his dear Kneipe. The data are incomplete, giving only plate (Westendorp & Wehner) and print (carbon).

A beautiful wood-interior always appeals to the camerist; but, unless the result possess a distinctive charm or a personal interest, the plate will have been wasted. Mr. Eitel's forest-studies are poetic interpretations—

the one on page 22 is an example—and those who would learn this artist's mode of procedure we refer to his inspiring and attractive article, with its numerous illustrations, in PHOTO-ERA for September and October, 1910. Data: $6\frac{1}{2} \times 8\frac{1}{2}$ Premo Camera; Bausch & Lomb-Zeiss lens, series VII, $19\frac{1}{4}$ -inch focus; stop F/12.5; Seed 26x plate; pyro; Platinotype print.

There are still many camera-users who do not know that a fairly-successful photograph can be made with a pinhole, i.e., without a substantial substitute for the lens, and also without any focusing. The pinhole-camera is the invention of Giovanni Battista della Porta, an Italian mathematician of the sixteenth century. Almost any book on physics describes this simple apparatus. The pictures on page 24—by W. H. W. Bicknell, the distinguished American etcher, who made a number of pinhole-photographs just for amusement—show the difference in sharpness of definition between a short draw (distance from pinhole to plate) and a long draw. The pictorial quality of these pictures is obvious, but this is due entirely to the camerist. Data: No. 1, No. 11 needle-hole; noon, bright sun; home-made box-camera; 30 seconds' exposure; 8 x 10 Seed 26x plate; Rodinal 1 to 25; No. 2, 15 minutes' exposure.

John Burdett Wills has made a particular study of pinhole-work, applying it successfully to a variety of subjects, as shown by several admirable pictures on pp. 27 and 29. Data: "Architectural Study"—View-camera; No. 10 needle-hole; 10-inch draw; Dec., 1.30 p.m.; clear, bright sun; 15 seconds; 5 x 7 Cramer Crown; pyro; Velox print. "The Chalet"—No. 10 needle-hole; $8\frac{1}{2}$ -inch draw; May, 4 p.m.; clear, bright sun; 70 seconds; Cramer Inst. Iso. "Baroness Rothschild"—No. 11 needle-hole; 10-inch draw; August, 11 a.m.; near a window; hazy outside; about $1\frac{1}{2}$ hours; 8 x 10 Platinum print; petals of rose opened a little during exposure. "Abutments—Shasheen River"—No. 10 needle-hole; 8-inch draw; August, noon; cloudy, $1\frac{1}{2}$ minutes.

Among the interpreters of child-life, none surpasses Mrs. W. W. Pearce, whose expressive and finely-modeled portrait of a young girl—a pronounced brunette—appears on page 30. Data: 8 x 10 studio camera; Dec., 2 p.m.; light, fair; B. & L. Extra Rapid R. R.; 14-inch focus; F/6.5; used at full opening; 1 second; Seed 27; pyro; Angelo Platinum print.

Owing to the individual manner in which the artist produced his print, the picture on page 31 has little resemblance to the conventional photograph. At first glance it suggests a copy of an oil-painting, executed with uncommon breadth of chiaroscuro. It is a picture full of rugged power and suggestion, and presents an unusual pictorial effect. The author is a prominent professional practitioner in Edinburgh. The modus operandi is as follows: January, noon; fog and sleet with watery sunshine struggling through; $6\frac{1}{2} \times 8\frac{1}{2}$ view-camera; Dallmeyer R. R. lens; 15-inch focus; stop, F/8; $\frac{1}{2}$ second exposure; Cadett Lightning plate; pyro-soda; printing-process, oil; original negative enlarged on a 12 x 15-inch plate and printed in oil, strengthening the shaft of light and subduing detail at the bottom of the print.

Our Monthly Competition

TASTEFULLY-ARRANGED interiors have formed the subject of previous contests, but their artistic treatment had not been seriously considered either by the editor or the contributor. This phase of the matter proved a stumbling-block to many, and for that reason most of the contributions to this contest possessed only technical merit. Many could not get beyond the mere technique, and general similarity in this respect was the conse-

quence. Individuality of selection and treatment was not much in evidence. The best of this class was officially recognized, but the highest two prizes went to interpretations—pictures which united satisfactorily technique with a high degree of expression and the personal touch. Such we believe to be the aim of the higher, advanced photography.

Edward R. Dickson—one of those modest, sterling artists of the camera, who have quietly and by dignified, legitimate methods gained artistic eminence—won the highest honor in this competition but, having now three such successes to his credit, will not participate in Round Robin Guild contests in the future, although examples of his work will continue to appear in these pages. The character of his individuality was analyzed in the June issue, which contained his prize-picture, "The Lost Pleiad." It is again exemplified in his original and refined portrayal of a corner of the Metropolitan Art Museum, page 34. The statue silhouetted against the light is a bronze copy of "The Resting Mercury" in the Museum of Naples. Data: Seneca 8 x 10 View-Camera; "Smith" lens; F/8; 18-inch focus; stop F/22; February, 1911, 5 p.m.; strong light; 16 minutes; Standard Orthonon; Rodinal; 8 x 10 American Platinum print.

R. M. Weed achieved his success by modest means. The subject, an Italian kitchen, page 35, is neither imposing nor elaborate. It is a simple, straightforward composition; well balanced; harmonious; broadly treated, and without one discordant note. Data: April; very poorly lighted; $3\frac{1}{4} \times 4\frac{1}{4}$ Kodak; filmpack; Goerz Dagor; F/6.8; used at full aperture; 5 minutes; Metol-Hydro; 7 x 9 Royal Bromide, redeveloped.

The interior capturing the third prize, page 36, shows a living-room, tastefully arranged, probably as it usually appears. The view-point is well chosen and there are no distracting lights or masses. Data: September, 10 a.m.; bright light; Voigtlander & Son's Collinear. Series II, No. 4; used on $6\frac{1}{2} \times 8\frac{1}{2}$ Orthonon plate with stop at F/64; 20 minutes; pyro-soda tank development; Cyko Plat. sulphide-toned print.

"A Foggy Morning," by Leon Jeanne, received an Honorable Mention in the competition, "My Favorite Photograph," but was crowded out of the issue in which the other awards were reproduced. Data: 5 x 7 Graphic; $6\frac{3}{8}$ " Protar; F/6.3; November, 11 a.m.; light weak, foggy; Standard Ortho.

Beginners' Contest

THE last competition in this class produced few satisfactory contributions, and only one award was made, viz: the third prize, page 36. The principal object is well spaced and the technique excellent. Data: bright day in January; R. R. lens; stop F/8; $\frac{1}{50}$ second; Lumière Blue-Label Plate; Eiko-hydro; Cyko print.

Camera-Tours in New England

EUROPE for those camerists who have ample time and money! For the others we recommend New England, with its unlimited wealth of scenic beauties. The mountains of Maine and New Hampshire offer delightful camera-subjects, in regions most accessible. Lakes, streams, waterfalls, fields, meadows, forests and mountains vie with each other to win the favor of the camerist. Here, indeed, is camera-material for all, and to suit the taste of the most exacting.

Full information regarding this beautiful region—the garden spot of the East—including hotel and boarding-house accommodations and a large, complete map is contained in an illustrated pamphlet entitled "New England Vacation-Resorts," a copy of which will be sent free for the asking by addressing Advertising-Bureau, Room 337, South Station, Boston, Mass.

ON THE GROUND-GLASS

Photographic Flower-Studies

AMONG the many books published on botany or in the form of flower-guides, there are but few of which the illustrations are trustworthy means of identification. Those which are drawn by hand and then colored are often quite inadequate, both in form and color. Much better than colored pictures produced by chromo-lithography are technically-perfect photographs from nature. Mr. Claude L. Powers, of Claremont, N. H., has produced a series of about one hundred different flowers which are not only perfect examples of photography, but possess considerable artistic merit. We had the pleasure to produce six of Mr. Powers' collection in the last issue, which were selected from a very large number, all of them of great technical beauty. Mr. Powers states that he has filled many orders for these flower-studies, in platinum and carbon, at 50 cents each, but he is prepared to make up a set of any number, for the readers of PHOTO-ERA Magazine, at a much lower price. Those who are interested in wild flowers may wish to communicate with Mr. Powers, who operates a professional studio at Claremont, N. H.

High-Minded Craftsmen

REGARDLESS of any law which prohibits the illegitimate use of sitters' portraits by photographers, many high-class practitioners take a decided stand in this matter. They have notices in their reception-rooms and studios informing patrons that their portraits and negatives are in safe keeping, and that prints will be delivered to no one except on a written and signed order from the sitter. Such practitioners also announce that fact on their stationery, which is usually of a tasteful and dignified character. J. H. Garo, J. C. Strass, Frank Scott Clark and other portraitists of this class have on their letter-heads the following statement: "No portraits given out for publication without the permission of the subject."

If all photographers had done this as conscientiously, there would be no need for laws to protect the public against unscrupulous members of the craft.

A Well-Merited Tribute

AMONG the collections of prints which have engaged the attention of the art-critics this year is William H. Phillips' series of fifty Spanish views, now touring the country. The eminent pictorialist has twice visited the Iberian peninsula with his camera and has interpreted the spirit and beauty of Spanish architecture in a most impressive manner. PHOTO-ERA had the pleasure to acquaint its readers with these admirable camera-impressions—presenting seventeen plates in the January issue—and is pleased to see that its high praise of these pictures has been endorsed by the American daily newspaper-press.

We herewith reprint the opinion of William Howe Downes, Boston's foremost art-critic:

"Of high artistic quality are the photographs of Spain by Mr. Phillips, now on exhibition at the rooms of the Boston Camera Club. It would be a difficult matter to find a country richer in good material for the photographer than Spain. Nevertheless, the paramount factor in the success of the photographic artist is the personal equation, and one must give the largest degree of credit to Mr. Phillips for his sure instinct for the most effective, the most interesting, and the most pic-

turesque subjects. Even in the Alhambra, that most exhaustively utilized storehouse of pictorial motives, his originality of choice has not failed him, and there is almost always something unexpected and impressive in his prints. Naturally, architecture predominates in the entire series, but it is architecture as seen in connection with landscape and human life, not as an isolated art. The itinerary takes in all, or nearly all, the most interesting cities of the Iberian peninsula, including Cordova, Seville, Granada, Cadiz, Ronda, Saragossa, Segovia, Toledo, Burgos, Valladolid, Avila and Triana. Perhaps the most striking and novel motives are those from Segovia, and Toledo, as usual, yields many subjects of great interest. One of the most striking negative merits of the series as a whole is its successful avoidance of the conventional and the commonplace."—*Boston Evening Transcript*.

A Mysterious Theft

A WELL-KNOWN Boston amateur was seated in an open car one warm day in May en route to Franklin Park, a favorite haunt of camerists. Reflecting upon the pictures he was going to take, he consulted his Wellcome Photo-Exposure Record and Diary, which he withdrew from his inside coat-pocket, and soon afterwards replaced. He then became aware that the two remaining seats, one on each side of him, were being occupied by two large men. He also realized that, in consequence, he was being tightly squeezed. He felt as though he were being held in a vise. Arriving at his destination, he managed to rise and leave the car. Somehow he suspected that he had been relieved of something. On investigating he discovered that his camera was intact, his watch and his pocketbook had not been disturbed; but his precious record-diary was gone! Had the thief been color-blind and mistaken it for his pocketbook? Or was he, perchance, an amateur photographer, who, unable to procure a 1911 exposure-record, had resorted to desperate means to obtain the coveted object? The current edition had been exhausted long ago, and the disconsolate camerist, unable to replace it, now offers \$1.00 for one in good condition. Immediate replies may be sent to the editor.

Only One

WE are asked to state the reason why "Who's Who in America," with its huge list of notables in art, music, literature, politics and finance, does not contain the names of eminent American photographers.

All we can say is that as soon as the publishers of the popular biographical dictionary are impressed with the fact that photography is a fine art or even the handmaid of art, they will, no doubt, include the names of distinguished photographic craftsmen and pictorialists in a future edition. Even now there are photographers whose names are certainly as well, if not better, known to the great American public than those of many professional men mentioned in the bulky red volume.

But hold! We have a copy of the work, and a careful examination reveals the name of just one, and only one, photographer! Can our readers divine his name?



"I VALUE your journal so highly that I am having several of my past years' subscription to PHOTO-ERA bound in handsome leather bindings as an addition to my library. MRS. H. A. FRENCH."

NOTES AND NEWS

Announcements and Reports of Club and Association Meetings, Exhibitions and Conventions are solicited for publication

Newark Museum Association Exhibit



BECAUSE of its interest in modern pictorial photography, and to demonstrate Newark's sensibility to art, the Newark Museum Association of Newark, N. J., held an exhibition of photographs during the months of April and May in the art-galleries of the Free Public Library. The Newark Museum Association was incorporated under the laws of New Jersey to establish in the city of Newark a museum for the reception of art, science, history and technology, and to encourage the study of the arts and sciences. Under the guidance of Mr. John Cotton Dana, the Museum has held many important exhibitions of paintings and Oriental art-objects, and rejoices in the possession of a unique collection of Japanese prints. The efforts of the Museum were directed primarily to show the citizens of Newark the artistic achievements of those who have chosen the camera as a means of expression. Although everything was arranged without elaborate preparations, students, members of various camera clubs and visitors from New York and other cities evidenced interest by their presence; showing the gradual awakening of the public to appreciation of photography as a medium of art-expression. With such a disposition to co-operate, no reason is apparent why photographic exhibitions may not be wholly conducted along similar lines by Museums showing an inclination to be interested in modern pictorial photography.

The prints represented the works of D. O. Hill, Clarence H. White, George H. Seeley, Alvin Langdon Coburn, Baron De Meyer, Gertrude Käsebier, Paul Lewis Anderson, Karl Struss, Wm. E. Macnaughtan, Alice Boughton and many other well known pictorialists, as well as the work of students from the Photographic Departments of Teachers' College, Columbia University, and the Brooklyn Institute of Arts and Sciences. The collection was presented, not as an irrefutable argument demonstrating the last word in the art of photography—since the work is not faultless—but rather to show the accomplishments of a group of sincere workers actuated by love of the beautiful and to exhibit the possibilities of the camera.

We feel too well the passing of the era of microscopic rendition as the only form of expression, imparting as it does no higher evidence of life than an ingenious counterfeit of the substance in view. Love of chemistry no longer dominates the feeling for line and for mass. An indefinable something, superadded to the elemental fact or idea, bestows refinement and delight. The col-



lection served to show the absence of hand-manipulated prints having the semblance of other crafts, and the retention of the beauty of straight photography. Imitation is an admission of inferiority. If, however, other artists are accorded the privilege to express themselves in mass or in detail, within the canons of art, the same liberty of action should be the heritage of the artist-photographer. One's attitude, therefore, must be governed by one's own feelings.

To Mr. Max Weber of New York was entrusted the hanging of the pictures, and he showed his exceptional ability in their presentation as an architectural whole. The Alcove Room, containing chiefly the work of the students and of PHOTO-ERA prize-winners, was most interesting; the print of each worker being hung in little alcoves, becoming thereby more intimate in their relation to the observer than the prints in the larger gallery. The walls of the main gallery were pleasingly toned by the discriminate employment of various colors of cheese-cloth, on which the pictures were hung in single line; some of the individual works shown in a group, while others were placed at such intervals as to break the continuity of line. About the rooms, on specially constructed pedestals, were placed specimens of ceramic art from potteries in Newark.

In point of comparison, therefore, it is modest to assert that the exhibition vied in beauty and excellence with the most pretentious held in this country, and that it was a success.

It will be interesting to follow the future achievements of the younger workers who have shown such decision of purpose, among whom are: Charles B. Denny, Francesca Bostwick, Amy Whittemore, Eleanor Pitman, Edith R. Tracy, Horace E. Stout, H. H. Moore and Flada E. Griffith.

In terminating this brief review, felicitations are extended the Newark Museum on its adoption of so broad a recognition of art, irrespective of medium. I desire to express the gratitude we in Newark have felt in viewing a display unique in the chronicles of photographic attainment. It is worth noting that the Museum purchased for its permanent collection prints which were shown in this exhibition. — *Edward R. Dickson.*

A Belgian Exhibition

THE BELGIAN PHOTOGRAPHIC ASSOCIATION will hold a prize-contest and exhibition in November, 1911, with entries closing Oct. 31. American amateurs are re-

quested to contribute. Prints should be marked with some device, a duplicate of which should be placed upon a sealed envelope containing the name and address of the sender. They should be mounted, but not framed, and must be delivered, carriage paid, to M. Robert, Asst. Sec'y Belgian Photographic Association, Palace du Midi, Brussels, Belgium, on or before Oct. 31. The package should be marked, "Print-Competition Closing Oct. 31, 1911." A contestant may send several sets of four prints each, but can receive only one prize. The prizes are five in number, ranging from 200 francs (\$40) to a bronze medal. All prints which are accepted will become the property of the Association, which reserves the right to reproduce them in its *Bulletin*, in which case the author will receive 25 proofs. Unsuccessful prints will be returned before January 31, 1912. Prints smaller than 5 x 7 are barred.

The Eighth American Salon

BEFORE this is in print, the prospectus of the Eighth American Salon will be out and will be mailed to all whose names appear on our mailing-list. If you are not sure that your name is there, please drop a card to the secretary, who will send you one.

The management is very desirous to have all our pictorialists represented in the American Salon by at least one print, and, while we can only persuade, we do think that our labors, which are given freely and enthusiastically, should be rewarded by the best collection of work ever assembled. Even now, the museums are writing for dates, showing that the Salon is an established event as well as how high pictorial photography stands in the art-world.

It is sheer foolishness to say or think that more honor awaits one in a foreign clime, where all artistic efforts are bound by certain fixed rules, where all efforts are to please a certain body of men—small in number and, consequently, narrow in view—while here, with the Salon traveling from city to city, from art-center to art-center—where the people are as different in their feeling, environment and artistic temperament as if they were of different countries in all but their adaptability, which is the rare national trait, your work is given crucial test. The judgment and applause of Americans are more to be coveted than those of any other country.

The Eighth Salon will be limited to one hundred and fifty frames, correcting the statement I made in the June issue of PHOTO-ERA. Any particulars will be given gladly by the secretary, C. C. Taylor, 3223 Cambridge Avenue, Toledo, O.

The Camera Club of New York

IN spite of the fact that the quarters of the New York Camera Club are probably the most spacious and complete of any similar organization in the world, the Club, at its last meeting, May 4, voted to abandon its present location and move into even more commodious quarters. These are to be located on the top of a twenty-story building now being erected at 58th Street and Broadway. A plan of the new quarters was thrown on the screen at this meeting, and the arrangements and facilities fully discussed. The general idea was received with intense enthusiasm. The new home will lack nothing in the way of first-class and most approved equipment, appliances and facilities, so that the Camera Club of New York should stand as a model institution in this or any other country. The new quarters will not be ready for nearly a year. The Club is in fine working-trium and an exceedingly prosperous condition. All is peace and harmony, for there is no one in the Club who seems to be inspired with a mission to create dissensions among the ranks. Many of the members are producing

first-class pictorial work and maintain the reputation of the Club as a soundly-active and influential body.

The Montreal Exhibition

THE Montreal Amateur Athletic Association Camera Club held its Fifth Annual Exhibition in the Life-Members' Room of the Association from April 17 to 22. There were nearly 200 pictures hung, including entries from various parts of Canada, the United States and England, many of which displayed artistic qualities of a high standard. The exhibits were classified and awards made as follows:

Open Class A, for figure-studies: First prize, W. S. Fife (Toronto) "Simple Life in Toronto." Second prize, H. Y. Simmons (London, Eng.) "Salomé—The Head."

Open Class B, for all other subjects: First prize, A. M. Bryson (The M. A. A. Camera Club) "Solitude." Second prize, B. F. Langland (Milwaukee) "Evening Landscape."

Club Class: First prize, W. R. Allen, "The Willows." Second prize, A. M. Bryson, "November." Green prize (Club) Chas. Adkin, "On Paul's Cray Common." The prizes were silver plaques for firsts and bronze plaques for the others. In addition to the above, the following received certificates of Honorable Mention: Wm. Armbruster (Jersey City) "Grazing"; John Dove (Philadelphia) "Sunlight and Shadow"; B. F. Langland (Milwaukee) "A City By-Way"; H. Mackie (Toronto) "Idly Waiting Time and Tide"; G. A. Melville (M. A. A. Camera Club) "The Student"; Mme. Pelouquin (Montreal) "A Country Woman"; and A. Van (Toronto) "Sparrows."

The Club held its Annual Meeting on April 28, in the Club House, Peel Street, when the following were elected to office: President, W. A. Allen; Vice-President, G. A. Melville; Recording Secretary-Treasurer, Chas. Adkin; Corresponding Secretary, P. S. Robinson; Executive Committee, M. Barford, Arthur McNally and Arthur M. Russell. During the past year the Club premises have been remodeled and extended, which improvements have doubled the working-accommodations. All communications should be addressed to the Corresponding Secretary, 250 Peel Street, Montreal, Canada.

Union Camera Club

THE Annual Meeting of the B. Y. M. C. Union Camera Club was held in their Club Room, 48 Boylston Street, on Tuesday evening, May 2.

The following officers were re-elected for the coming year: F. W. Hill, President; H. A. Stanley, Vice-President; P. T. Cain, Treasurer; H. E. Bump, Secretary. The Treasurer reported the Club finances to be in excellent shape, with a substantial balance on hand. The Secretary reported a total active membership of forty-four (44), twenty (20) of whom were present at the meeting. The Entertainment-Committee gave an interesting talk illustrated with lantern-slides of the April Monthly Outing of the Club, which was held at Marblehead on April 19. Light refreshments were served later and a general smoke-talk was held among the members.

Harry Coutant

AN EXPERT PHOTOGRAPHER who has recently left the amateur ranks and become a professional is Harry Coutant. He sends us a card stating that he is prepared to execute commissions for all kinds of photographs, including negatives and positives for motion-pictures. He is also prepared to do photo-finishing which is different from the usual commercial sort. Mr. Coutant may be addressed at 18 Alice Court, Brooklyn, N. Y.

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Contributions relating to photography in any and all of its branches are solicited and will receive our most careful consideration. While not accepting responsibility for unrequested manuscripts, we will endeavor to return them if not available, provided return-postage is enclosed.

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HEAD OF A YOUNG GIRL
RUDOLF DUEHRKOOP



PHOTO-ERA

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John M. Whitehead's Art

WILLIAM FINDLAY

IN a small country town in Scotland, resting snugly at the base of the Ochil Hills, resides a zealous worker with artistic faculties highly developed and manipulative dexterity of a high order. The town has no pretension to be a "fashionable" summer-resort, and though it is a pretty place, one might think its pictorial possibilities were limited. However, this accomplished worker has discovered in the vicinity pictures which have been thought worthy commendation by the Royal Photographic Society, which have been awarded innumerable prizes all over Great Britain and the Continent, and which, through reproduction, are slightly known in America. His name is John M. Whitehead, and the town in which he has his abode is Alva, about seven miles from historic Stirling.

One of Mr. Whitehead's pictures, "A Moorland Cot," appeared in these pages last year, and readers must have been struck with the originality of the conception and the fine technical quality which was apparent even in the reproduction. Thinking they might, like Oliver Twist, be wanting more, and having previously, through correspondence, become exceedingly friendly with Mr. Whitehead, at the editor's request I paid him a visit recently in an endeavor to satisfy this craving and bring readers into touch with this strong personality.

Mr. Whitehead has a trim little studio in which he conducts a portrait-business, and in this class of work he finds scope for one side of his artistic nature. Round the studio is a flower-garden, and part of Mr. Whitehead's spare time is devoted to attending to this. What more natural, then, than that he should devote some attention to flower-studies? In this class of work his first exhibition-success was achieved, one of these studies being awarded a medal at Geneva. He sent a print about the same time to an exhibition in the Midlands of England. He modestly attached no price to it, but what was his surprise to receive, a few days after the exhibition opened, an intimation from

the secretary that he had taken the liberty to sell the picture at a good price to a gentleman who fancied it very much. Mr. Whitehead was naturally anxious to know who had thus honored him, and wrote asking who the purchaser was. He was proud of having sold his picture, but prouder still when he knew that the purchaser was Mr. H. Snowden Ward, and thus began a helpful friendship which lasts to this day.

Mr. Whitehead gave me my choice of any of the pictures of flower-studies adorning the walls of his reception-room for reproduction-purposes, and I selected "Wild Briars," which will give readers some idea of these exquisitely delicate photographs. Before touching on his landscape-work, which has brought him fame and shown his marked individuality, may I tell a story?

A native of Alva called at the studio one day to have her photograph taken. She was accompanied by a friend. While in the reception-room, she was very much interested in the flower-studies, most of which she recognized. Coming to a particular one which was beyond her ken, she asked Mr. Whitehead what it was. He told her that it was a spray of "docken," a prolific wayside weed, in which perhaps only an ardent botanist might find beauty. "Weel, weel, Nellie," said she to her friend, "if Maister Whitehead can mak' a docken look as bonny as that, there's hope for me yet!" And there was, for she was highly delighted with her "caird."

Flower-studies, as has been indicated, were Mr. Whitehead's first essay in exhibition-work. Next he bided him to the woods, finding here also scope for his artistic gifts, and "Deep in the Woods" is a fine example of this phase of his work. It will be admitted that this picture and the flower-study are excellent photographs without the additional information being given that they were both medalled, but Mr. Whitehead's true personality did not evolve until he produced "Where Once the Garden Smiled" (and here be it noted that the work of the late



WILD BRIARS

JOHN M. WHITEHEAD

Horsley Hinton inspired Mr. Whitehead to attempt this class of subject). Some ruined cottages near his abode attracted his attention, and, seeing them under a magnificent sunset, he resolved to secure a picture by the aid of his camera. He was successful, and it was shown at the Royal Photographic Exhibition in London. The picture, besides being awarded the Royal medal, was purchased as a house-picture and hangs among recent notable works.

Since then, Mr. Whitehead has concentrated his pictorial proclivities on landscape. At the opening of his "one-man show" in London last November, there was a discussion among the members of the R. P. S. about the advance which photography has made during the past seven years. One of the members in the course of the discussion said that though he would yield to none in admiration of the work on the walls, it would be difficult for anyone unacquainted with Mr. Whitehead's work to say that this one belonged to a certain year or that one was taken later — in short that the high standard he had attained with his first successes had not been surpassed. Personally, I am inclined to think that he is yearly progressing, and I have chosen the pictures he kindly placed at my disposal for reproduction partly with a view to prove this contention. "A Silent Guide" when compared with "Where Once the Garden Smiled" shows

a marked advance in the breadth of treatment, and if subscribers care to look at "The Moorland Cot," which appeared in these pages last May, or at "The Sleeping Fields," they will note a further advance. But Mr. Whitehead's latest triumph, "Tempest-Riven," which — except for being shown in the Scottish Salon, and honored by being reproduced in the catalog — has never been put before the public till now, shows a still greater advance. But even though Mr. Whitehead did not progress further — and he will if health and strength be granted him — the photographic world appreciates the genius he has already shown, and is grateful to him for the splendid examples he has given of his skill. His pictures have a distinct individuality, a haunting presence, and breathe the spirit of true, appealing poetry.

Mr. Whitehead's method of work is this: In his walks in the gloaming he may see something which satisfies him. He will return on a favorable opportunity, and "twixt the gloamin' and the mirk" will make an exposure, giving as long as half an hour when the atmospheric conditions make it necessary or permissible. Of course, any clouds which might have been in the composition originally are hopelessly lost, but his negative yields him a print breathing the atmosphere of the twilight — if such an expression be allowed. No haphazard selection of a cloud-



negative takes place, but Mr. Whitehead patiently waits for the suitable sky to incorporate with his picture, and he has waited as long as five years for a harmonious cloud-effect. Having secured it, his manipulative skill in registering the two negatives comes into play. Then, having got by combination printing a print which satisfies him, this is worked up and copied, and from this negative the exquisite platinotype and carbon prints admired in all exhibitions for their fine quality are taken. They find a ready sale, and are in the homes of art-lovers all over Great Britain. They will soon be in American homes too, it is to be hoped, for there is more pleasure in looking at a Whitehead — the work of a real artist — than at many of the “conceptions in massive gilt” which adorn the homes of many “patrons of art.”

In conclusion, I wish to thank Mr. and Mrs.

Whitehead for their hospitality when I visited them, and I shall long remember the tramp “o’er moor and fen, by crag and torrent” I had with Mr. Whitehead, when he showed me the leading features of many of his famous pictures. As has been indicated, a casual visitor might see little of pictorial worth in the vicinity, but he has shown to the world that the bleak hillsides, the silent moors, the lonely cottages, and the scattered trees abound with beauty — only, as he expressed it, “one has to get into the spirit of a place”; and long may the spirit inspire him to produce these exquisite pictures!

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EXPRESSION, and not composition, is the end and aim of Art: and the moment that composition becomes the end, instead of only a means to an end, Art becomes artificial. — *A. J. Anderson.*



WHERE ONCE THE GARDEN SMILED
A SILENT GUIDE
JOHN M. WHITEHEAD



Bulb-Exposure

BEATRICE B. BELL

IT is generally conceded that most failures among amateur photographers are due to neglect to focus and to expose properly; and of the two, the latter seems the greater bugbear. So many camera-users seem quite oblivious to the advantage to learn a few simple facts about picture-taking! They have no idea of the possibilities of their cameras; and, moreover, do not seem possessed of any curiosity about them. Anything more complicated than snapshots would plunge them into a world of confusion from which exit seemed impossible. And yet, if their interest is once aroused, they are likely to go deeper and deeper into the realms of photography — and, their pocketbooks.

If all photographers used actinometers and cameras with focusing by ground-glass or reflecting mirror, there would be less subject-matter for the magazines; but there are snapshooters (and those who dabble in picture-making with little knowledge of the elements of the art) who, like myself, use roll-film-machines with focusing by scale; and their number is not likely to diminish. And for them, perhaps, a few words of my experiences may not be amiss.

At the beginning of a three months' trip through the Eastern States, I purchased a 4 x 5 Kodak with Rapid Rectilinear Lens, T. B. I. exposures and stops from U. S. 4 to 128. The salesman impressed upon my mind the necessity to set the shutter before and to turn the film after exposure. He explained the loading of the film and the focusing by scale, and added the injunction that never under any circumstances should I point my camera toward the sun. I wonder why salesmen take so much trouble to inform customers of that fact. We do not always see the world with the sun behind us, and surely the practice of photography would be limited, with no choice of lightings, if we followed this injunction.

However, being favored with fine weather, I brought home from that trip a fair-sized collection of snapshots. Spending the next four years in California, my picture-taking continued along the same line — snapshots with the camera between the sun and the subject, and, considering the success attending my efforts, photography was to me but "pressing the button," as some one else "did the rest." Of course, I did not realize the unusual power of California light, and my limited knowledge of the camera might have continued indefinitely, had not my picture-

taking been transferred to another climate and an entirely different atmosphere — that of a smoky city in northern Ohio. After I had exposed several rolls of film — all of which were failures — a photo-finisher explained the cause of the trouble, which was, of course, underexposure, and he further enlightened me by pointing out the stop- and exposure-arrangements on the Kodak. I had always supposed that T. B. I. was a sort of trademark, and that 4, 8, 16, 32, 64, 128 constituted the number of the camera. As the stop was at 16 when I purchased the Kodak, the California-views were all sufficiently timed, and it took several rolls of film to teach me the difference in light-intensity and the use of the stops.

During this time, I became interested in photographic magazines; I think July, 1906 PHOTO-ERA was the first I read; and in trying to learn, at the same time, composition, lighting and exposure, combined with proper distance and stop, my work for about a year was a strange conglomeration — occasionally a chance success, but mostly failure. The main difficulty — still underexposure — was finally obviated by the purchase of a tripod, combined with a more thorough knowledge of the mechanical devices of the Kodak — simple in themselves, yet needing full understanding for complete success.

Among my friends beginning in photography, I find the greatest difficulty lies along the same line as did mine, and I take great pleasure in initiating them into the mysteries of "bulb-exposure." Beginners usually object to a tripod — too much bother, and rather conspicuous among friends not educated in photographic possibilities — and to them the "bulb" opens new fields in picture-taking.

A little practice will soon enable one to hold the camera steadily for a shortest bulb-exposure, merely the quickest possible pressure and release of the bulb, and this exposure will be found sufficient for most views in the shade, the stops used varying from 16 to 4 according to the depth of the shadow. Where U. S. 32 is required for definition, the bulb-exposure will be useful, and for well-lighted interiors with U. S. 4 it will often give a good negative. Landscapes and flower-studies in the open in dull weather, or with a color-screen on bright days; portraits in the shade; views before sunrise and after sunset — all are subjects for the bulb. I rarely have a failure because of blurring of the image,



THE SLEEPING FIELDS

JOHN M. WHITEHEAD

though on windy days it often helps to rest the camera against some solid support.

One learns considerable about light-intensity when photographing at all times of day, in all kinds of weather and in different parts of the country. I have made snapshots of sufficient density at U. S. 4 on very dull winter days in Southern California; and U. S. 16 in good sunlight was always enough. Northern California in winter required U. S. 8 under best conditions; of course, not including seascapes. Minnesota, Wisconsin and Ohio gave good negatives at U. S. 8 on bright summer days; or U. S. 4 in the clearest autumn weather. With clouds, haze and smoke, so prevalent in Indian summer, a bulb-exposure was necessary to portray the delightful quality of atmosphere. The Florida sunlight was a revelation. Though it was apparently as bright as that of California, my first exposures at U. S. 8 were all under-timed, and some of the next lot at U. S. 4 were not of sufficient depth. Perhaps the glaring white sand accounted for my mistaken idea of its brightness. The Florida experience gave me one picture which I value greatly. I had the pleasure to "go the rounds" with a trapper who was trying for raccoons but didn't object to possum, fox or skunk, all of which were numerous in the region. As it was before sunrise, I didn't anticipate any pictures, though I took the Kodak

along. One of the traps held a raccoon, and as we came near it fought at the end of the chain, not to get away, but to reach us. The trapper wouldn't wait for good light but insisted on putting the animal out of misery at once, so I waited until the raccoon ceased to struggle for a moment and made the bulb-exposure at U. S. 4. The finished film showed the animal pulling at full length of the chain, one foot in the trap, its head in wonderfully clear focus and its eyes fairly blazing with hatred of its superior enemy—man.

Success is reached only by constant endeavor, and in photography progress sometimes seems discouragingly slow. There are so many pitfalls to overcome and so many details to master, that the earnest beginner feels overwhelmed. Experiment is the stepping-stone on the path of advancement, and though the path may be strewn with failures, the experience gained will be worth while.

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PICTORIALLY, the vertical line is much more important than any other. It is the direction of gravity; it represents man upright, in distinction from the brutes; it also can stand alone, all other lines demanding supports. Of two equally forcible lines, this would first be seen. In composition, therefore, it has the right of way.

Henry R. Poore.



TEMPEST-RIVEN
JOHN M. WHITEHEAD



Marine-Photography, With Special Reference to Proper Values

C. H. CLAUDY

TO all too many photographers — and not all in the amateur or beginners' class, either — a good photograph is one in which shadows are clear and not blocked up, highlights possessing detail, a print made from a "good" negative, with proper observance of the various photographic canons of neatness and general technical excellence.

But a photograph may be technically perfect and artistically bad — it may be artistic and technically excellent and still fail of truth!

The answer to this seemingly paradoxical statement is found in the one word "values."

Photographs offend one's sense of truth when the values are incorrect, whether the net results be *pretty* or not. Thus, a striking picture possessing many elements of beauty may be made of any summer sky, with fleecy white clouds, by using a very deep ray-screen. The result is the white and fleecy clouds standing out against a very dark, almost black sky. Name this "Coming Thunder-Storm" and a thoughtless photographer will rave over it, yet it is a plain misstatement. Fleecy clouds are not a part of a thunder-storm, nor are they usually found silhouetted against very black clouds. Certainly they were not, in the original, in this instance. The photograph has rendered nature truthfully so far as drawing is concerned, but untruthfully as regards values.

Perhaps in no one branch of photography — unless it be that which concerns itself with making photographs of snow-scenes — is there more of this untruthful rendition of nature's values than in marine-photography — pictures of sea and sky, sandy beach and curling breaker, wind-swept dunes and gaunt, bare wrecks against a sunset sky.

The reason is not far to seek. More people photograph inland than on the sea-coasts. These people flock to the ocean in hot weather. They make photographs of the ocean and all its surroundings and parts of its life, with the same outfit, the same photographic knowledge and the same rules and regulations which guide them inland.

Inasmuch as marine-photography is governed by a set of laws all its own, the results of these inlanders' efforts are not infrequently painful. If the tyro engaged in marine-work does anything at all to fit his practice to his new conditions, it is usually a decreasing of the size of

his stop or an increase of his shutter-speed, for "you know the light is so much faster here, one has to use less of it."

Then, when his innocent little results reveal themselves as repetitions, pantoums in soot and whitewash, reiterations of one constant theme of glaring white for sand, inky black for figure and occasional streaks indicating waves, he blames the light, the film, the camera, the weather, the finisher — but seldom his own lack of knowledge of seaside conditions.

Now there is nothing hard about making photographs of the sea or seashore subjects. Save for the extra care which must be taken of photographic apparatus and sensitive material, due to salt and damp air, there can be nothing inherently any more difficult in picturing the sea than the land — in making photographs of boats instead of automobiles, or wrecks instead of houses. The only difficulty comes in the realization that there is a difference between photography inland and upon or near the water. Once this is grasped, and the essentials of this difference mastered, and the problem of good marine-photography with proper values is solved.

Even as the amateur sayeth, the principal difference between marine and inland photography is in the light — its quality and its quantity. Its quality, photographically speaking, is rich and harsh — that is, it contains an abundance of violet and ultra violet rays, and it is direct and fierce. Its quantity is greater than inland for two reasons — one the unobstructed sky, all of which reflects light to the things you may be picturing, the other the reflective power of water and sand, both of which materials can fire back at you a most unusually large amount of light received by them from sun and sky.

Great quantity of light means shorter exposures or smaller diaphragms. Contrasty lighting — strong lighting — means contrasty pictures. Short exposures and small diaphragms add to contrast in any pictures, compared to larger diaphragms and longer exposures. Therefore, the solution of the difficulty of the inland amateur — to decrease size of opening and increase speed of exposure, merely adds to the resulting contrast of the picture, and makes the tonal values of the photograph worse and worse!

The remedies are two in number. First a ray-screen judiciously used and a proper choice



THE DISTANT TOON

JOHN M. WHITEHEAD

of days in which to work and hours in which to photograph — second, a nice adjustment of exposure and diaphragm, which, while they will probably be less in size than those used inland, will be greater in proportion to the amount of light available than would be proper inland. Thus, let us imagine for the sake of argument that inland, with a certain light, an exposure of one second with a stop of $F/8$ was proper. Let us also suppose that at the seashore the light is exactly four times as strong as inland. To make the same picture then, the amateur reasons that he must either give an exposure of one-fourth a second, or cut his diaphragm down to $F/16$.

But practical experience will prove that such a course produces a harsh and contrasty result with improper tonal values, though the negative, technically speaking, may be good and proportioned as well as the inland-made negative. The answer is found in increasing this "normal" time and giving, perhaps, half a second — overexposing, in other words. Such overexposure must be complemented by underdevelopment, which, we know, means lack of contrast. Un-

derdeveloping a short exposure means simply lack of sufficient printing-density — the shadow details don't come up at all. But *underdevelopment* of an *overexposure* cuts down the contrast, while permitting full values in the shadow details. Therefore, in all marine-work in bright lights, where contrast must, to some extent, be eliminated in the photograph in order to get those tonal values in the print which appeal to the eye as truthful renditions of the color and light-reflective ability of the objects photographed, an overexposure with underdevelopment is recommended, with the distinct caution that an overexposure may well be less in total time than the exposure given a similar subject inland in the same light.

The choice of the right kind of a day for photographic work has much to do with proper tonal-values in marine-work, as has the choice of the hour at which you will work. A cloudy day without mist or fog will cut down sea and sand contrasts to such an extent that you may well have to increase the comparative exposure over what you would give on a sunny day! That is, if one-half a second at $F/64$ is the proper ex-



MOONRISE

JOHN M. WHITEHEAD

posure for a picture of a lighthouse on a sunny day, and a cloudy day diminishes the light four times, you would naturally argue that the stop should be $F/32$. But the decrease in contrast due to the absence of direct light may well make such an exposure too much, so that $F/45$ with the same exposure would be more properly indicated.

Seashore light varies very largely in quality with the time of day, the mornings — early particularly — providing a yellow light, largely because the rising sun sends its rays through air charged with water-vapor. This is less the case in the evening, on the Atlantic coast, because the sun's rays are coming through land-air, which is not so likely to be damp air. Yet in spite of these elementary facts which almost any one can ascertain by observation alone, it is not at all uncommon to see ray-screens in use at sunrise and sunset, for other than sun- or sky-pictures.

The subject of orthochromatics, fumed plates and adjusted ray-screens is too large and deep to dive into here. Suffice it to say that what-

ever the scientific reasons for the use of a ray-screen may be, the visible effect of a yellow cell over the lens is to yellow the image on the ground-glass and, of course, to produce the same yellowed image on the sensitive plate. This yellowed image is produced by the ray-screen's eliminating much of the violet and ultra violet rays and passing all of the yellow ones. Obviously, if the light itself has little of violet or ultra violet — if these rays have already been "screened out" by the moisture and dust in the atmosphere, there is little use in using a ray-screen. Hence, early morning and late evening are not the proper times for the use of a ray-screen unless for sunset-views or cloud-effects, when they may be employed, often with reason and success.

On the contrary at high noon, or at any time when the sun is high and bright, at the seashore, a ray-screen is often essential to aid in cutting down the contrast and eliminating the too great effect of bright reflected light upon the plate. Here, again, one comes up against the great dif-



ference in the light inland and at the seashore. A five-times ray-screen inland may well prove itself not more than a three-times screen near the ocean, simply because the preponderance of violet rays from unobstructed sky, acting through pure air, cannot be so subdued and cut out by the same screen as will have that effect inland.

Quite apart from all questions of tonality, frequent failures in seashore pictures can be laid to a wrong position of the camera, a wrong angle of view, or the use of too short a lens.

Any slanting horizon is an absurdity. In landscapes it is sometimes less offensive than in other places, simply because the broken contour of hills or tree-tops on the sky-line conceals its crookedness. But a horizon-line at sea not parallel with the edge of the print is only a certificate of ignorance and incompetence for the photographer.

Many a would-be artist is aghast at the result of his endeavors to render on his plate and print the majesty of a curling breaker of Old Ocean. Instead of the towering wall of water, falling with a crashing boom at his feet and spelling power and might and wonder, behold his picture of a little wavelet, flat, and without any suggestion of dignity or might. Reason — too high a view-point. The lower the camera in making a picture of a wave, the higher that wave appears. Be warned, and don't use a high tripod close to the wave-line, if you want your wave big.

Anything more unattractive than a succession of horizontal lines crossing the plate in a photograph can hardly be conceived. They come from nowhere, lead nowhere, say nothing to the mind of the beholder. Photographs of the ocean made at right angles to the line of beach ought to be prohibited by law! It is so very easy to turn the camera and, instead of parallel lines crossing the plate, have long, converging lines of waves and shore, beginning at the foreground and converging in the distance, leading the eye from the edge of the picture straight into the very heart of the picture, that not to do it is to confess one's self inartistic in the extreme.

But not all your adjusting of camera as to height or position will create a thing of beauty from Old Ocean as a subject, if you try to get all his wetness at once on a five by seven plate. It isn't to be done. For that reason don't attempt to use a wide-angle lens for seashore-work — indeed, for any pictorial work — be content with a narrow-angle lens, and remember that there is plenty of space, so that the narrow-angle lens will not prevent you from making a single picture you want, since there is always room to get back and away from the subject.

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You are not an artist if you have not earned the hatred of fools. — *Theodore de Banville*.

Those Masterpieces

The Bony Man

E. L. C. MORSE

THE sun was hot — atrociously hot — on the sands, and even under the lee of Sullivan's cottage it was far from comfortable. I had been in the water and was drying myself luxuriously in my bath robe when the child came down to bathe. Such an exquisitely-moulded youngster I had never seen before — a miniature Greek statue! He was about eight years old and wore only the minimum of clothes that the law allows. He was exquisite and unconscious. I scurried back to the house and reappeared on the scene with my camera carefully concealed in my robe. It would, of course, have been perfectly easy to make his acquaintance, pose him and make a conventional picture; but I had had enough of that. What I wanted was an unconscious, characteristic attitude bringing into play the manifold graces of that statuesque bit of humanity. Lake Michigan and a little strip of beach would make a satisfactory background, but that horrid brand-new pier must be shunned. So, too, must that conglomeration of buildings with the flaring advertisement and the mob of non-descript bathers. Just the boy, the beach and the water — what could be better? And that old log, cast up by the waves? Yes, the log might be included in the foreground. It was old and weather-beaten and seemed to have had a history. If in the right place it might relieve the rawness of the sand and water. Clearly here were the makings of a good picture — possibly a masterpiece. And, by good luck, here comes a yacht from down town. Kid, sand, water, beach, log, yacht, on the one hand; and an F/6 anastigmat, ray-filter, fast orthochromatic plate and an ambitious amateur photographer on the other!

But — there are always buts in the picture-business — the youngster of course would not stand still, would not get into line for me and would not strike an attitude except where I didn't want him. If he should suspect that I had a camera it would be "all off." There were a lot of girls in bathing further down the beach, screeching and screaming, but that didn't interest him, and I was too intent on my play to watch them. McCluckie's big Scotch shepherd dog was running up and down the beach, but I didn't want him either; I had taken him several times. But, horrors! what is that com-

ing my way? Such a figure! Will he ever quit parading in front of my camera? I have a mind to snap him, but I guess I won't waste a plate on him. A bald-headed man with a fringe of red hair, bow-legged, hair on his arms and legs, all bones — and the worst of it is that he seems pleased with himself, The Bony Man!

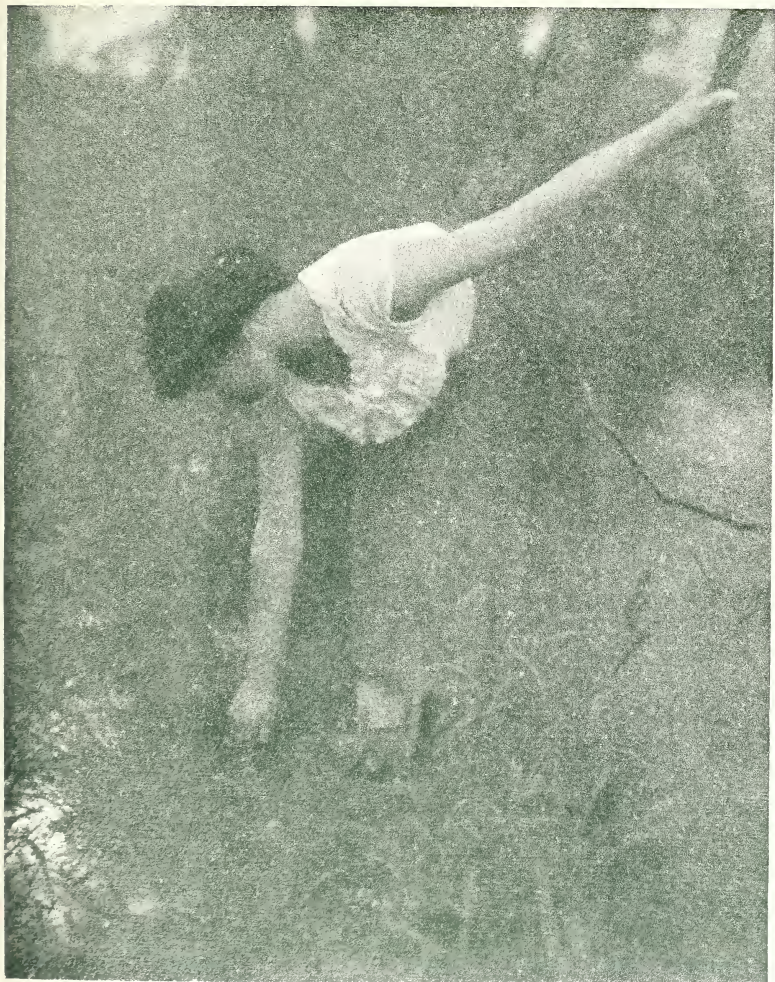
No, I am wrong; he is not gone on himself; he is gone on those girls and is going down there to stare at them. And the dog is going down there, too. Now I shall have young Hermes to myself and it is only a question of time till I get him. There he is lying on the sand and examining a shell that he has picked up. He is squinting an eye to see into it. That won't do; besides, he is in line with that abominable pier. I will wait till he gets up. He is up in a few minutes, but has made a dash for the water and is floating on a raft. Perhaps I might take him on the raft, but only a small portion of him would be in view and he would have to see my camera, and that would spoil it all. I shall have to wait His Imperial Majesty's pleasure. The wind has shifted, the sand is soft and comfortable here under the shadow of the cottage and this old pipe is not so bad when you are waiting for your quarry!

"Laird" (that's the name of McCluckie's dog — Scotch dog, Scotch name, Scotch man), Laird is running up and down the beach, smelling at The Bony Man, who doesn't seem to like the dog's attentions. Laird evidently doesn't approve The Bony Man either. But The Bony Man is fascinated with the girls in the water down there. The girls don't reciprocate. In fact they tell him to "skidoo," but he won't let them alone.

Well, what do I care so long as they keep away from my field of vision, or rather, from my lens' field of vision?

Ah, there comes my youthful model back to the shore again. He is seated, making a castle or some other delightful affair in the sand. I might take him now, but he would be too small and I should have to stand up. No, I must wait.

Now I have him. Somebody has appropriated his raft. And it is *his* raft, mind you, and nobody else's. He found it and it is his. Salvage, of course. One of the most elementary principles of maritime law is involved. So he



THE LILY-POND

LOUIS FLECKENSTEIN

proceeds to lay down the law to the intruders — naughty, unprincipled boys who do not respect vested rights. The law as he lays it down is not precisely as it would come from the Federal Bench, but it is good sound law, and he does the occasion justice. There he stands on the beach, left hand on hip, right hand gesticulating, one shoulder-strap in place, the other fallen down, one leg of his trunks up, the other down, dripping with Lake-water and eloquence. Picturesque — dignified — unconscious — delicious! Now is my time!

Furtively I glance up and down the beach. The Bony Man is still staring at the girls. Laird on the other side of him, watching him out of one corner of those sagacious eyes. All safe down there. Up the beach is a man in a Scotch cap. He is out of the way. All clear! F/6; 50 ft.; 1/100 sec., filter, iso. plate. Blue water breaking into white waves that gently lap the yellow sands, weather-beaten timber, purple shadows, yacht jockeying for a breeze, low-lying cumulus clouds. A masterpiece — and it is mine!

"Heigh, Laird," shouts McCluckie. (Strange that I had not recognized Mac before).

"Heigh, Laird," shouts McCluckie again just as I had raised my direct-vision view-finder and had my model exactly at the intersection of the two lines.

"Laird, recognizing his master's voice (like the dog in the gramophone advertisement), starts home. The Bony Man thinks the dog is after him and starts to run. The girls hope he is, and, resentful of the Man's attentions, shout, "Sic him, Tige!" Seeing the bag of bones ahead of him running at full speed, Laird thinks it is a good joke and playfully nips the Man's

hairy calves. Terror-stricken, the Man turns round and sees the fierce beast behind him, mouth open, and redoubles his efforts to escape. The picturesque log which was to be such a valuable accessory in my picture is in the way; he stumbles over it and in falling knocks the boy down — and ruins my picture.

* * *

"Evidently this is not my day for pictures," said I to myself as I filled the old pipe again and began to ponder on the vicissitudes of fortune.

"Willie, Willie," said a strident voice like that of a maid-of-all-work, "Willie, your ma wants yer."

In the altercation and argument that follows Willie was not at his best, at least from a pictorial point of view. But he yields at last and goes home. With him disappears my masterpiece; and the incident adds one more to that long list of magnificent, soul-thrilling works of art which were never taken.

I still have the two plates in my holder unexposed. In disgust I gather a lot of youngsters who are playing on the sand, pose them in conventional style and snap them.

One more plate is left, and I sally down to where the girls are in bathing. Gwendolyn, Ethelberta, or Maggie, or whatever her name may be, is emerging from the water, not precisely like Venus arising from the sea, but she will do for the last plate.

But Willie, my seraphic Willie, my statuesque Willie, Willie of the bronze tints and Demos-thenic attitudes remonstrating with the pirates of the raft! . . .

"Mais où sont les neiges d'antan?"

When to Stop Development

DEVELOPMENT of negatives with a maximum of good results and a minimum of waste is a problem that appeals to practically all photographers, both beginners and a great number of workers with more experience. Otherwise, how is it that so much attention is paid to methods of intensification and reduction? The negative, development of which has been stopped at the proper time, needs no other modification unless the exposure has been grossly incorrect.

Perhaps the whole question may be most clearly considered if we divide those who develop their own exposures into three groups — the beginner, who wants to get a good percentage of successful record or souvenir nega-

tives; the worker, who likes to develop his exposures singly, or at most two at a time; and the user of plates which are so sensitive to almost any portion of the spectrum, that they must be developed in complete darkness. In each case we will assume that all possible precautions have been taken to get the exposure reasonably correct.

We think the two best courses for the beginner, who, of course, knows very little about the appearances of a normally-exposed plate during and at the end of development, will be the two variants of time-development. That is, either factorial development, or development for a fixed time pure and simple. Let us briefly outline the factorial method first, assuming that Rodinal is the developing agent employed.

A convenient strength of developer is eighty minims Rodinal in four ounces of water. As many of the plates to be developed will probably be exposed in the hand-camera, there is no necessity to add any bromide of potassium, for under-exposure is more likely than over-exposure. Take a plate or two plates together, and flow over them four ounces of diluted Rodinal, and at the same moment commence counting seconds by saying "one little second, two little seconds," and so on. In perhaps ten, twelve or fifteen seconds a distinct indication of image will appear; stop counting, and multiply the number of seconds counted by the factor of thirty. This is quite a simple matter, for it is only necessary to halve the number of seconds, and call the answer minutes, and the total time of development is obtained. Thus, if the image appears in twelve seconds, the time for development will be six minutes, thirty times twelve seconds.

When extremely color-sensitive plates are being handled there is no alternative but to develop in total darkness, so that the method of working must be by time alone. The Rodinal developer will answer exactly, or a metol-hydroquinone developer may be employed. As workers who employ this type of plate will probably require a greater degree of accuracy in their work, to the extent, at all events, of the negative's being suitable for a predetermined printing-process, precautions will be needed with regard to adjusting the temperature of the developer to the time of development.

Two courses are open—either to bring up the temperature of the room to the standard, say, 65 degrees Fahr., maintaining it at that point until solutions, measures, dishes, and so on have been influenced, and then carrying on development for the normal time, which in this case may be four to five minutes; or, as a rule, isochromatic and bathed plates give density rather more readily than non-iso. plates; or to test the temperature of the developer by means of a quick-acting clinical thermometer, increasing the development-time if the solution is colder than the normal, and decreasing it if warmer. One of the up-to-date firms supplying ultra-color-sensitive plates issues with each box a card which gives the formula and the times of development at various temperatures.

The worker who prefers to be free to make any modification he may desire during the development cannot adopt a time-method, but must come to a conclusion by the appearance of the negative. The appearance is noted when the image first comes up, and if the halftones and shadows follow the highlights in rapid succession, over-exposure has to be counteracted. The

general tendency is to remove such a plate too soon from the developer, the graying over of the plate during the early stages of development being regarded as a "fading away" of the, for a brief time, bright and distinct image. Such a plate needs a longer development than one normally exposed.

On the other hand, if the highlights come up clear and strong, and are not shortly followed by the halftones, too brief an exposure has to be reckoned with, and the plate should be at once flooded with water, the developer being first returned to the measure. Such a plate will require careful watching, or development will be carried too far and excessive contrast be the result.

But if the image appears gradually and the halftones and shadow-details succeed each other at reasonable intervals, so to speak, how shall the decision be arrived at, and with plates other than normal, after making our modifications, how shall we know when enough density has been gained? Some indication of the image should be visible on the film-side even when the plate is completely developed, unless the exposure has been very full; but if any patches of quite ungrayed film remain, it is certain we have under-exposed. On examining the back of the plate, the highest lights of the picture should show fairly distinctly, and if the plate is held for a brief moment in front of the ruby window, the image should appear clearly and of good strength. By holding the finger at the back of the plate, we get a patch of complete opacity, which is helpful in estimating the strength of our highlights. The character of the subject needs to be considered, some subjects demanding a very delicate negative, while others need a natural flatness or hardness to be counteracted in development. It is on account of these variations of subject that allowances require to be made in the timing and factorial methods which deprive them of that complete simplicity so often claimed for them.—*The Amateur Photographer*.

MILLET'S MASTERPIECE

THE famous art-collection bequeathed to the French nation by H. Chauchard, the dry-goods merchant, who died over a year ago, was opened to the public in the Louvre last month. Much comment was caused by the fact that "The Angelus," by Millet, for which the merchant paid \$170,000, does not occupy as conspicuous a place as "La Fileuse," by the same artist, which cost only one-twentieth as much. "The Angelus" is considered Millet's most popular picture. The critics declare that its renown is based on the sentiment it expresses rather than on its superiority as a painting. [—*Exchange*.]

Flesh-Values in Portraiture

THE moderns in photographic portraiture cannot justly claim all the credit for rendering the human countenance in a low key. The representation of values was successfully accomplished even in the days of wet-plates, and such capable portraitists as Rocher, Sarony, Gutekunst and Notman imparted to the sitter's complexion a tone much deeper than that of the white portions of his costume, and only in very rare instances was the highlight on the face as pronounced as that of the collar or the shirt-front. Modern practitioners, as a rule, recognize only portraits that are low-toned, but are often inclined to err by carrying low lighting to excess. To-day, however, the best men in the profession are satisfied with nothing less than the correct representation of flesh-values in portraiture. The matter of key depends upon the conditions of light and the surroundings, if not altogether upon the judgment of the artist-photographer. Although there is a unanimity of opinion among portraitists on this subject, there are points on which they differ, and it is therefore interesting to compare the opinions of some of the foremost practitioners on this important question, as expressed in communications to the editor and presented herewith. — EDITOR.

Highest Light on Flesh if Necessary

AGAIN the old time-worn subject: one to make as many argumentative enemies as religion or politics.

I believe you are right in concluding that the tone-values of the face should be rendered as accurately as possible. Generally speaking, the face should be lower in tone in every part than a starched, white linen-collar; but from my standpoint, I want to feel free to light my subject in the way that seems to me best; whether it be with the highest light on the flesh or elsewhere. I then expect my plate to render the values as I see them; making due allowance for the imperfect values of the silver plate.

Bright tints of yellow or pink are more noticeable or alluring to the eye than white, and are less retiring; therefore, more important! These colors come forward and impress the eye more intimately. Sometimes the very light pink complexion of the young lady who "never tans" will, in certain lights, overpower the soft white gown she wears. A photograph of this young woman, if not made in good color-values, will look very unnatural to one who is more sensitive to color than to line. Again, sunlight is a great leveler of values; to the extent that the sunlight,

striking the subject at a certain angle from the eye, might pile up its highlight on the flesh — why not? — *Howard D. Beach.*

White Faces Are Not Artistic

I AM not partial to the low key of lighting. I light my portraits in a medium key. It pleases my patrons. I agree with what you say about the face being represented in a picture as perfectly white. It is not in harmony with artistic and progressive photography. — *Harry A. Bliss.*

A Chalky Face Is Not Natural

I HAVE of late years endeavored to give the face-values as near in proportion as flesh is from white; that is, flesh having color will not photograph white, neither should it be made to appear in or near that color. I prevent, as far as possible, ladies from using powder, for that has a tendency to make the face appear chalky, which is not the natural color. If they must embellish, I much prefer rouge, which helps the color-scheme of the face, and does not tend to ruin the likeness.

We seldom have a request for a white face, as was formerly the case. Most of my patrons prefer their portraits in a medium low key, and frequently request that they be left natural, with little retouching. This is to me an indication that the public is being educated to a better quality of work. — *A. L. Bowersox.*

Flesh-Tones Should Not Be White

I BELIEVE, of course, in representing the real value of flesh-tones as contrasted with the white of linen. I do consider, however, that a customer is to be pleased rather than to be educated, and that his preference should be regarded in return for the order placed with me. A swarthy person invariably objects to a low-toned lighting. Such a sitter does not wish to go down to posterity quite so dark-skinned as he really is.

On the other hand, I never represent the highlights on the face as *white*. There is a happy medium in portrait-photography as in other things. Fortunately many of my patrons prefer true artistic values. — *Mary Carnell.*

Flesh Should Be Represented as Luminous

PERFECT portraits have the highest lights in all parts of the picture slightly tinted. Many photographers lower the values in hands and arms so that they look as if smoked. Flesh is



very luminous and should be so represented that you feel its warmth in viewing the photograph. Many workers spoil what might have been a good example by placing some opaque object between the light and sitter to control the light side of the face. They succeed in doing this, but destroy the drapery and shoulder nearest the source of light, and throw a shadow on the side from which light should be coming. Drapery, light or dark, should not be lowered in values so that one does not feel the existence of the man or woman sitting in their clothes. Values should not be placed in so low a key in the lower parts of the portrait that the subject loses its support. I have seen many such examples called good by photographers. Hands and arms in great portraits are not much out of tonal values with the face. When a customer

complains of the flesh being represented too dark, I make it lighter, because I think, after all, his wishes should rule.

I believe that a perfectly fine portrait by photography is understood by middle-class people and appreciated also. And I find many of these very same people willing to pay the highest price for such photography.

Retouching as practised in the average studio is a curse to photography. Few retouchers understand the construction of the face. Most of them go over the face and give it a perfectly characterless cast, much in the manner of the plasterer when he finishes his wall. You see examples of this in trade-journals which advertise photographers who use mounts and papers of their make. J. C. Strauss has been very sane along these lines. — *Frank Scott Clark.*



Flesh and White Drapery Never Alike in Tone

THERE can be no question that there is a decided difference in tone between the face and any white drapery, nor is there any considerable surface, be it flat and all white, that has the same tone-value throughout its entire surface.

I think there is no one, however uncultured, who does not recognize the difference between white drapery and the flesh, but who might fail absolutely to discriminate in the broad, flat surface. A good photographer should recognize all these differences. However, as there are varying degrees of discrimination in individuals, naturally different individuals would seek different ideals.

In my own practice, I have found the closed

tank in development produced coppery faces, from my point of view.

I have found little objection on the part of my clients where I could conscientiously say I thought it right. — *E. B. Core.*

The Human Flesh Should Be Shown as Flesh

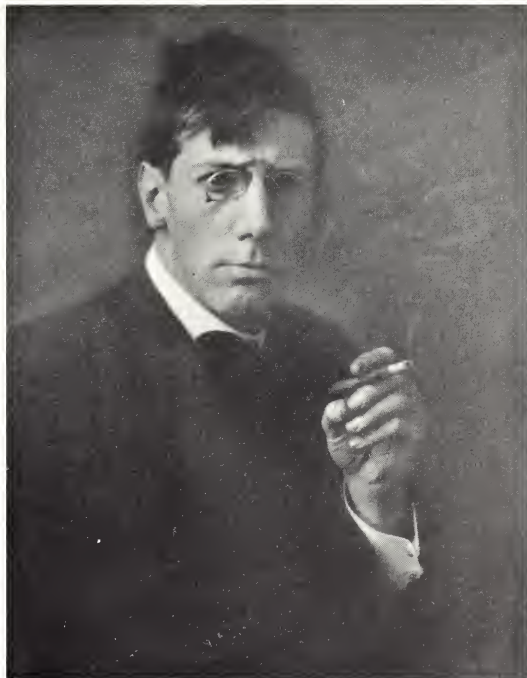
THE recognition of comparative tone-values in portraiture is an important subject and one which the American photographers know how to manage with splendid success. This was demonstrated at the great International Photographic Exposition at Dresden, in 1909. It was a revelation to us German photographers of the mental capacity, admirable training and artistic comprehension of our *compères* in the new world.



As to my opinion about the matter, I beg to refer to my pictures which have been published from time to time by the American photographic press, and with a liberality far beyond my deserts. Many of these reproductions are admirably executed, and illustrate fully the strong difference which I make between the complexion of the subject and bright accessories. Flesh is interpreted as flesh, not as a piece of white paper; while the nature of a white collar, white lace or a shirt-front must not be falsely represented. Not only that, but the expression of the face should dominate the picture, as in good painting, and not allow the interest to center elsewhere. I have seen many photographs, technically perfect, even of eminent men, in which the modern, broad, high collar—may the days of its existence decrease—is shown in all its literal, glaring whiteness, without even

the slightest *nuance*! And, when the face seems to have not much character, even if in a low tone—according to nature—the effect is—well, not artistic. It is easy so to place or light such a sitter that the offending collar will be less obtrusive. In my portraits of Max Fiedler, which PHOTO-ERA reproduced so superbly—December, 1908, and November, 1909—I have tried to bring out and emphasize the soul of the man so that the observer is not embarrassed by the presence of the shirt-front and necktie, which latter, however, also have, if you please, a certain degree of character. In Mr. Hoppe's portrait (PHOTO-ERA July, 1909), which is brilliantly lighted, the strongest spot is the burning match between the subject's hands. Much of the attractiveness of a low-key portrait in photography depends upon the clearness and beauty of the tone. If it is uneven, flat or

PORTRAIT
LOUIS FLECKENSTEIN



weak, it cannot be called artistic, and it has no reason for existence. Portraits in a low tone must be consistent and convincing. It is not well to go to extremes in such matters. There are some photographers who are too quick to admire unsafe examples of portraits in a low key, and when they try to emulate them without having the necessary ability, they produce results that are only ludicrous.

The American conventions are great institutions and no photographer who calls himself progressive can afford to miss them. They are great educators. — *Rudolf Duerksen*.

Avoid Overdevelopment

THE subject about which you write seems to me one on which there can be no debate. Any photographer who pretends to be more than a

machine should necessarily know that the highest lights on the face cannot be represented by white paper. If the sitter is properly lighted and development is not carried too far, correct flesh-tones must follow. This is the A. B. C. of photography. — *J. H. Garo*.

Photo-Engravers Demand Chalky Portraits

My experience in Los Angeles indicates that most customers are willing to let the photographer use his own methods of posing and lighting, although demanding brilliancy in preference to low-toned effects. This, however, can be attained without sacrificing the tone-values, and a print showing good modeling throughout is generally more satisfactory than the harder variety. At the same time, there is not a single



half-tone-engraver who will undertake to make a block from a print that is not two-thirds blank white paper in the flesh-tones. The dailies and the popular magazines insist on the white ground and crisp, broad lighting; likewise the publishers of the school-annuals. A print in a low tone throughout will appear as a dirty smudge in reproduction, and it is, therefore, up to the photographer to cater to the whims of the block-maker, or know beforehand what purpose the picture is intended for. Photographers who are patronized largely by professional people recognize the necessity to eliminate tone in order to meet the requirements of the publishers, and are successful accordingly. On the other hand, the more progressive photographers are educating the public to appreciate the value of tone, and there is an increasing demand for the latter class of work. The public wishes to be shown, however; though it is rare, indeed, when a comparison of the two types does

not instantly convince your intelligent patron of the superiority of the low-toned print, and that the flesh-tones are not correctly rendered when they are made to correspond in brilliancy to the collar and cuffs worn by the sitter. Photographs in a low tone are growing rapidly in popular favor; but until the art of half-tone-making is improved, the toneless print will continue to represent up-to-date portraiture, as the reading public understands it. — *Louis Fleckenstein.*

A Portrait Must Be Well Balanced in Light

I REGRET to have time only for a brief reply to your remarks about representing the human face, or any part of it, as white as a linen collar or other article of dress.

If a photograph is well balanced in light, it is a good one. If it is well balanced in light, there will be no trouble such as you mentioned in your letter. — *Geo. W. Harris.*



PORTRAIT
J. H. GARO





Accent Imparts Life

HIGHLIGHTS in flesh-tones are not pure white. Portraits in low tone or medium key, if done properly, are both good photographic art. Whichever style is the choice of the photographer, he should employ it in no half-hearted manner. He produces low-toned portraits because he believes in them. Or, he prefers to portray his customers in a medium key, for he knows this to be right. To attempt to do both would be fatal to his reputation as an artist. I am an advocate of conservative lighting—the medium tone—and my patrons seem to be satisfied with my results.

Accents impart life to the portrait, but they must be well placed, else the balance is destroyed. The flesh-values must be represented as nearly like nature as is possible to do in

monochrome, and consistently so. To represent a light complexion as dusky, or vice versa is neither truthful nor desirable. Human flesh even in sickness or death, does not resemble white paper; nor is a highlight on the face or hands as white as chalk. But when a sitter's collar is in shadow, even under a strong light, it can be many shades darker than the face. White drapery, lace, bows, collars, shirt-fronts and neckties can be endowed with character—call it modeling, *nuance* or what you will. It is best to produce it by the lighting, rather than by local work on the negative or by sunning the print. — *George H. Hastings.*

Values Should Be Carefully Rendered

VALUES, the relation of one color-gradation to another, should be carefully rendered. The

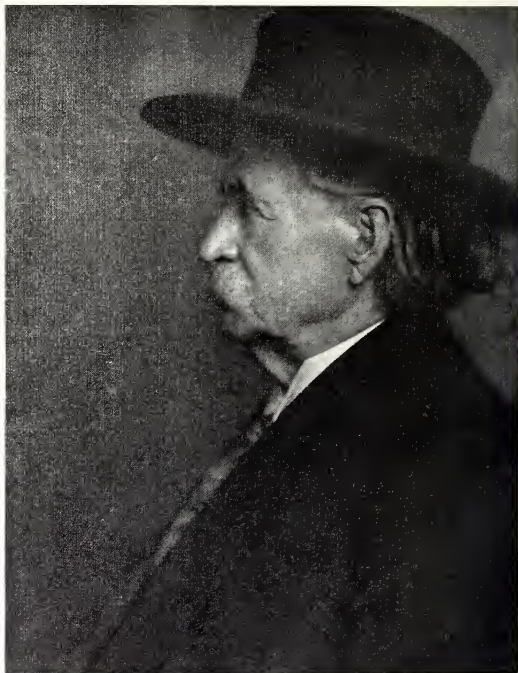


PORTRAIT
GERTRUDE KAESEBIER



PORTRAIT

WILL H. TOWLES



greatest judgment should be exercised in the use of the camera. We all know — this is my untechnical way of putting it — that it records white twice too fast and shadows twice too slowly. Therefore, with this in mind, one must carefully study the image on the ground-glass, mentally translating it into a black and white print, looking for the lightest light and the darkest dark, and arrange a harmonious tone-quality, develop the plate intelligently, and — there you are! There is a certain public which does not like correct flesh-tones, because it has been educated to a false standard by artisans, rather than artists. There is also another public which is a growing one! — *Gertrude Kaesebier.*

Photo-Engravers to Blame

YOUR favor of the 14th received and from the contents I assume you are making an effort

to impress upon photographers the correctness of true tone-values, as opposed to the old-time "chalk and charcoal," which unfortunately is still insisted upon by most photo-engravers.

In the light of the very excellent work being shown by photographers throughout the country, I think there is more need for education among the photo-engravers along the line of tone-values than there is among the photographers.

I sincerely wish there were more people in the engraving-business who would endeavor faithfully to reproduce a *good* photograph (such as is shown in your very excellent magazine), and not demand of the photographer an especially-made print of the harsh, chalky nature usually asked for by the average numbskull in the engraving-business. Therefore, I would ask that you lay the fault at the door of the workman to whom it belongs and not charge the pho-

tographer with not knowing enough to render true values in his photographs when allowed to follow his own inclinations.

With regard to the public's appreciation of correct tone-values, I — speaking from my own experience — have but to say that, if we photographers make real portraits, well composed, properly lighted, with correct tone-values, upon a medium that will render a loose, atmospheric quality, the public will not be slow to appreciate our efforts.

In fact, the better class of our patrons, while not always able to express in technical terms what they mean, are ever demanding our very best; and the photographer who will equip himself with the necessary knowledge, taste and technique may be sure of ample returns for producing the best that is in him. — *C. L. Lewis.*

White Faces Are Not Correct

IN answer to yours of April 13, would say my every effort is to keep the face of my picture in a key low enough to represent the actual tone-values of the face. I feel that a few photographers carry this to an extreme; at the same time, to my way of thinking, the contrasty or white faces are anything but correct expression of the reality, nor are they pleasing if intended for idealized versions.

My customers are, I believe, a little out of the ordinary, in that they are led by me.

Possibly, if I had a transient trade this might not be the case; but I rarely have a customer who takes exception to my interpretation.

When such *is* the case, after I have explained my reason for so doing, if they are insistent, I give them what they want, for they pay for it, and I do not have to look at the finished result. But public taste is improving. — *Blanche Reineke.*

Light Faces Only for Money

I AGREE with you on the tone-value question and love to make low-keyed portraits. Some painters produce their work in a high key but always keep the flesh much lower than the drapery. I have an occasional customer who wants a light face and hands and, of course, in working for money I try to please him. It is much more difficult to work in a low key, but it is worth while. — *F. M. Somers.*

Every White Spot Must Show a Tone-Value

I THOROUGHLY agree with you in working for a separation of color in portraiture. I have put forth every effort to educate the eye to see balance and separation, and always work in a value

of diffusion. I never make a negative until I can see balance as I want it in my pictures. I do not depend on the darkroom to get it, but do it with the light. In my demonstration at Philadelphia, in March, in Mr. Rau's studio, I made about twenty negatives in which I was able to secure all my concentration and gradations with the light. The negatives were all straight-developed plates and none of them needed any local work whatever. I always make my flesh show a color — *never white*; in fact, I don't like any white spots in a picture that don't show a tone-value. Our patrons do not appear interested in tone-values. They seem to be well satisfied with what we think is right. — *Will H. Towles.*

Light Should Be Properly Balanced

THE human face has but two small parts which are absolutely white, whether it belong to the Caucasian, Ethiopian or Malay race, namely, the teeth and the eyeballs. As you have already suggested, "Every intelligent portrait-artist recognizes the difference between the facial complexion, however light in nature, and such highlights as collars and white gloves."

The china plate, porcelain tray, marble or plaster cast are beautiful to look upon and often of priceless value, but who would accept such a complexion if it were in his power to exchange the tan skin, red nose, blackheads and even pimples? If this is true in nature, why accept such abominable white-faced, chalky portraits as likenesses of that one who is nearer and dearer to you than any one else, namely, yourself. Possibly more failures in portraiture occur from not having the light properly balanced than from any other one cause.

The learned customer demands correct values, whether in low-tone or high-tone work. We humor customers just as far as is consistent with the knowledge we have attained of the art of photography. If, therefore, we have not advanced with the profession, we cannot expect the refined and cultured patronage which would otherwise be ours.

If our ideal is limited only to the plain technical study of photography, we may expect our customers in this progressive age to make demands which are beyond our capacity.

Allow me to suggest the following practical thoughts. Keep your ideals a little higher than those of your best customer. Remember tone-values are not limited to the face but embrace the whole. The subject should be placed well under the light rather than too far back, as is the present tendency. This will produce roundness and better atmospheric results and, lastly, balanced light. — *Charles F. Townsend.*

Some Elements of Photographic Chemistry

MALCOLM DEAN MILLER, A.B., M.D.

BEGINNING in photography is like setting out to sea in an open boat. If one takes compass and charts, the port may be reached even if it is not in sight from the starting-point: without some guide, the inexperienced navigator will be cast away as soon as he gets out of smooth sailing. The beginner with a camera has furnished for him a clear, simply-written instruction-book to act as guide, and if he lays his course by it will arrive in port with some negatives to show for his exposures; but after he has mastered the elements of picture-taking and advances to photographic literature in general, he finds himself in the position of the yachtsman called upon to navigate a liner without any knowledge of the mathematics of the art of navigation. All the words are strange and meaningless. The chemical terms, in particular, are beyond his ken and cannot be compared with anything in his general knowledge.

In this article, I propose to explain in simple, non-technical language, as much of the chemistry of photography as relates to the preparation and use of plates or films. To begin with, I shall use the word plate to mean either the glass dry-plate or the roll-film, because they are different only in the nature of the support on which the sensitive material is spread.

The metal silver is the foundation of most modern photographic processes, but it cannot be used in the metallic state. The salts of silver — so called because of their resemblance to common table-salt — are the essential substances. If pure metallic silver is subjected to the action of nitric acid, the solid silver disappears, bubbles of gas are given off, and a clear liquid remains. If this liquid is allowed to evaporate, square plates of silver nitrate separate from it. These crystals, as they are called, are sensitive to the action of light and if left in the sun would turn black. The black substance formed is metallic silver in very finely divided particles. In the same way, if you write on cloth with water which contains a little silver nitrate, it acts as indelible ink. It is this sensitiveness to light possessed by salts of silver which enables them to record an image. For instance, if a piece of paper is coated with silver nitrate dissolved in water, dried in the dark, and then exposed to light under a leaf, the paper will show an image of the leaf. This is the basis of printing-out paper, commonly spoken of as P. O. P.

Before we go on, it might be well to explain

more fully about salts. As stated before, they are named salts because they resemble common table-salt, which is composed of the chemical elements (indivisible substances) sodium and chlorine. Sodium is a silver-bright, soft metal and chlorine is a heavy, greenish-yellow gas with a suffocating smell. The union of the metal and the non-metal produces a white, non-lustrous substance, sodium chloride, or salt. We saw above how the salt silver nitrate was formed from metallic silver and nitric acid and it is now clear that its name preserves the names of the two things which acted to compose it. In the same way, if we take a little of the white salt called potassium bromide and dissolve it in water, it will cause, when added to a solution of silver nitrate, the formation of a yellowish solid, silver bromide, which separates from the liquid and falls to the bottom of the vessel. Your druggist will doubtless be glad to do this experiment for you so that you may get a good mental picture of the process. Now place the silver bromide in a strong light and you will see that it darkens.

The practical application of the action of light on silver bromide is found in the dryplate. The plate is coated with a soup composed of gelatine and finely-divided particles of silver bromide. When this soup, or emulsion, as it is called in photography, has become cold it acts just like so much chicken-bouillon, that is, it becomes a hard jelly. Your plate, then, is simply a sheet of glass (your film a strip of celluloid) covered on one side with a substantial thickness of emulsion-jelly. The coating differs from the P. O. P. in being enormously more sensitive to light, so that the particles of silver bromide are acted upon by exposure to daylight for even 1/1000 second. It is, therefore, necessary to protect plates from all white light (including candle-, oil-, and gas-light) until they are exposed; and again after exposure until they have been developed and fixed.

If you were to look at your film in the dark-room by ruby light you would not see any picture on the surface, as you did after printing the leaf on the sheet of paper. The image is invisible or latent, requiring chemical treatment before it will become visible. The process of causing the image to appear is called development.

We have seen that a salt may be formed by treating a metal with an acid. The opposite case

is true also: that is, we can treat a salt with a chemical and break it up into a metal and another substance; the metal here being finely divided and black. This is what takes place in development: each particle of silver bromide which has been affected by light has thereby been rendered capable of developing or blackening when treated with a chemical called a reducing-agent, that is, having the power to break up a salt and set free its metal. The reducer (our old friend, pyro, for example) acts in the following way. When the developer is poured over the exposed plate, the pyro attacks the water and breaks it up into its elements, hydrogen gas and oxygen gas. The oxygen instantly attaches itself to the pyro and causes it to turn dark: the hydrogen attacks the particles of silver bromide and breaks them up into metallic silver and an acid, hydrobromic acid. But the developer contains an alkali, sodium carbonate, and this at once turns the hydrobromic acid to sodium bromide, a salt. This process goes on all through the thickness of the layer of emulsion until enough particles have been blackened, or reduced to metallic silver, to form a useful negative image. In principle, it is only the grains which have been acted on by light which are capable of blackening, but if development is conducted under improper conditions, others may be affected, causing fog. In practice, too, it is possible to develop too far and blacken parts of the plate too much. But when the plate has

been correctly exposed and properly developed, the image will be made up of patches of varying blackness proportional to the lights of the subject. Wherever the light from a white object has been condensed by the lens there will be a patch of considerable blackness. Wherever the faint light from a dark object has fallen there will be little action, and the negative will be only faintly blackened.

To finish the negative, it is necessary to fix it. Fixing is a chemical process for removing from the emulsion all the silver bromide which was not acted upon by light and therefore not developed. If it were not done, the plate would turn dark when exposed to white light. In its chemical nature, the process is one of solution. The finely-divided black metallic silver composing the image is not soluble in "hypo," but silver bromide is. Hence, if we put the developed plate into a tray containing hypo, the yellowish bromide gradually disappears. The hypo first forms a new compound containing both sodium and silver, and therefore called a double salt. This compound is next dissolved from the film by the excess of fresh, unaltered hypo present. When all the milky appearance has disappeared from the plate it is only half-fixed, because the double salt has been formed but not yet removed from the gelatine into the fixing-bath. The final washing removes all chemicals capable of dissolving in water, leaving on the plate nothing but gelatine and black silver.



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EDITORIAL

Ludicrous Faking

AMONG the latest contributions to art-literature is Birge Harrison's book of practical advice to artists on landscape painting. The master's counsel may well be applied to artist-photographers. He says, for instance: "One of our best painters recently assured me that cheek was his only technical asset." This was not true, but it was half-true. Inasmuch as the public likes to be dictated to in matters of art, even to be bullied, Mr. Harrison proffers the following advice: "Aim to tell the truth, but if you have to lie, lie courageously. A courageous lie often has more virtue than a timid truth." These bold words might have been uttered by the late Horsley Hinton or by some other notable pictorialist who believes in composite printing. The English *al fresco* practitioners are adepts in this form of picture-blending, extremely beautiful combinations of land and sea, valley and mountain, having left their printing-frames. It is a perfectly legitimate method of faking, although the painter, however daringly he may misrepresent, never feels that he should apologize for his recourse to license. Hence, like the painter, the author of a successful combination-print has a right to feel that the result justifies the means. Obviously, the process demands considerable knowledge and experience. Yet we have seen, at important exhibitions, prints by highly-esteemed pictorialists which were positively ruined by clumsy attempts to fake. Imagine a noble stretch of meadow streaked with long late-afternoon shadows, and a sky filled with cumulus noonday clouds! Or, a quiet, low-toned landscape suggestive of eventide; laborers bearing working-implements are returning homeward; the concentrated bright light low in the western horizon we interpret as the last salute of the departing sun. "The Crescent Moon" is the title of this imaginative impression. But what do we see! The horns of the alleged new moon are pointing the wrong way. It is really the *last quarter*, always seen in the eastern sky, but, here, *badly drawn and placed in the west!*

We greatly admire moonlight-effects, but we are not partial to pictures in which the form of the moon has been faked, having been deposited on the negative or on the print. Such an expedient is rarely successful. If the luminary is to be represented by means of the camera — as recommended by a moonlight-specialist —

care should be taken that it occupies relatively the same position as it does in nature, and directly over the densest part of the reflection. Any additions to the print of a landscape — whether by means of separate negatives or by individual handiwork — should be made to appear accurate, logical and convincing, without in the least betraying the method. Otherwise, the effect of the illusion does not obtain, and the result yields the author only ridicule and contempt.

Principle in Advertising Not Always Sufficiently Emphasized

THE principle of honesty in advertising does not seem to be sufficiently emphasized or even mentioned by the many lecturers on the subject. Great stress is laid upon the originality of the advertising-copy and how to get results. All this is tremendously important; but how about the moral side of the question? Of what benefit to the public is the guaranty of an advertiser having no personal honesty nor financial stability? Following its unique policy, PHOTO-ERA will continue to reject advertisements intended to deceive the purchasing public, thus contributing its share towards the elevation of the advertising-business. A case in point is that of a certain importer whose initial copy accompanying the advertising-contract contained several declarations which were absolutely untrue. In refusing him the privilege to publish such statements in PHOTO-ERA, we assured him that we did not question his personal honor or his financial soundness. Other publications have accepted this firm's business; PHOTO-ERA has declined it. It is, however, gratifying to state that — with rare exceptions — photographic advertising is honest and trustworthy.

In a forcible address delivered before the Graduate School of Business Administration, at Wilmington, N. C., several months ago, the well-known advertising-expert, H. N. McKinney, made the following statement: "The first and most important requisite of all advertising is honesty; no success can be permanent unless honesty is the foundation upon which everything else is built. The article advertised must be honest in its manufacture, in its appearance and in its price, while the advertising must be honest and truthful in all statements and in all impressions and inferences."

THE ROUND ROBIN GUILD

An Association of Amateur Photographers

Conducted by ELIZABETH FLINT WADE

This association, conducted under the auspices of PHOTO-ERA, and of which PHOTO-ERA is the official organ, is intended primarily for the benefit of beginners in photography, although advanced camerists are just as welcome and many are numbered among its members. The aim of the association is to assist photographers by giving them information, advice and criticism in the Guild pages of PHOTO-ERA and by personal correspondence. Membership is free and may be obtained by sending name and address to PHOTO-ERA, The Round Robin Guild, 383 Boylston Street, Boston. Send a stamp for complete prospectus.

System and Order

PHOTOGRAPHY is one of the callings or pursuits which, as much if not more than any other, demands that its votary not only work with system but also arrange all his appliances in an orderly manner. One should in pursuit of it decide what special phase of photography interests him most, and then he should devote his main work to perfecting himself in this branch. Then everything which he uses in connection with his work should have a place of its own and be at once restored to that place as soon as used.

Perhaps the first thing to do after the darkroom is arranged and places chosen for each article is to devise some scheme for storing and classifying one's negatives. There are many devices on the market for storing negatives, but the cheapest and in fact the simplest and handiest of all are the manila envelopes designed for this purpose. They bear on the face printed headings which are to be filled in and make a sort of history of the plate. Then, too, they prevent the scratching of the film, are easy to store and easy to get at. The editor has described several times her method of storing negatives and given dimensions for the building of similar cases, and anyone who wishes this description may have it by remitting the price of the copy wherein it is contained.

The indexing and classifying of the negatives should be done in such a way as to make it only an instant's work to locate a wanted plate. One may index in three ways, first, chronologically as the plates are made. This way is a sort of progressive index and shows one's improvement. Then there is the additional index wherein all the negatives are placed each in its particular class, landscapes, marines, portraits, still-life, etc. This classified index enables one to find a certain picture very quickly, and as the negatives are arranged in order of numbers—one, two, three, etc., one has simply to select that number. If the negatives are not classified it makes the location harder to find in the index, particularly when one has accumulated, as one is certain to do, a large number of negatives. If not classified, the negatives should be arranged in an alphabetical index with their numbers, though this method is not specially to be commended. Still another index which one may make and which is really worth making is an illustrated index, the prints being blueprints, arranged in the order in which the negatives were made. The number of the negative from which it is made is of course placed under each print. One can with such an index look up and determine whether certain negatives will answer certain purposes, such as picture-postals, illustrating, decorative work, etc. It is also a very interesting pictorial record of one's photographic progress.

In arranging one's chemicals each kind should be kept by itself—developers in one group, toners in another, etc. Every tray and glass should have its own

special place. Printing-frames should be kept by themselves and not allowed to come in contact with any chemicals. All dishes and trays should be cleaned as soon as one has finished using them, for if taken care of in this way they will not need special cleaning and scouring. The fixing-tray should never be put inside the developing-tray or vice versa, for if the hypo is not thoroughly eliminated the developer is sure to suffer.

All liquids which are to be used only occasionally should have melted paraffin wax poured over the cork and neck of the bottle to prevent oxidization of the contents.

In using plates from a box it is a good plan to mark how many have been taken out or how many are left, then one may know just how many plates he can count on from an opened box.

One would like to write pages of directions about system and order in one's work, but each worker must devise some plan for himself and follow it to the letter. Then he will not only succeed, but his work will move along easily and swiftly.

Camera-Attachments

ONE of the most important supplementary lenses for a camera is called the telephoto. This is similar to the portrait-attachments recently described in these columns, and enables one to make pictures of distant objects of the size and with the detail which would be the result if he were at a shorter distance from the object. This attachment is inexpensive and may be had for all sizes of cameras, even the small ones of fixed focus. It practically doubles the usefulness of one's lens and is of special value when one is traveling. It is also a desirable adjunct when one is making studies of wild birds and animals, because it enables one to get a good picture of fair size without having to approach so near the subject as to frighten or startle it. The telephoto lens is the one most used by those amateurs who make a specialty of bird-life studies.

Another attachment is the copying- and enlarging-lens. This costs \$1.50 for a camera using a 4 x 5 plate. It is of great value in copying pictures or photographs. For instance, if one wanted to copy a 4 x 5 picture with his 4 x 5 camera and the ordinary lens, the size would be only about that of a postage stamp and the detail would be practically lost. With the enlarging-attachment, one may make a copy almost the size of the original, or it may be enlarged, say, to more than double its size. This lens is easily put on and removed, having adjustable springs which hold it in place when it is in use and allow it to slip off like the cap to a lens when one has finished his copying.

A portrait-lens is another attachment which one really needs with a small camera. It is placed in front of the regular lens, which may be a rapid rectilinear, and the combination of the two lenses makes an excellent portrait-lens which gives the same softness and excellence



"LOOK AT THIS ONE!"
MARIAN WHITE LITTLE
FIRST PRIZE —
SPRING-PICTURES



THE WILLOWS
W. B. MORRISON
SECOND PRIZE —
SPRING-PICTURES



of modeling as does the regular portrait-lens. The price of this lens is the same as that of the copying-lens mentioned above.

A ray-filter is a piece of yellow glass mounted in a light metal cap. It is intended to cut out the blue and violet rays from the sky and allow the foreground and the sky to print together. Without this attachment one often loses all detail in a sky, owing to the over-exposure of this part of the picture in order to get correct exposure in the landscape part. This is also a very valuable adjunct when photographing flowers or paintings and may be used with orthochromatic plates, a filter of this kind being made particularly for use with color-sensitized plates. Those supplied with sets of supplementary lenses are usually very poor, being too brown in color. It is better to pay a good price for either the "Ingento" or the "Isos" filters, which give maximum color-correction with the least increase of exposure.

If one uses an exposure-meter one will find the kind called the "Autotime Scales" a most convenient sort,

for it is attached permanently to the camera and is always at hand. To use it, one sets the speed-indicator at the kind of light which illumines his subject and the other pointer or indicator at the kind of picture. The movement of these two pointers sets the shutter automatically for the right time for making the exposure. This attachment costs more than the ordinary exposure-meter, but pays for itself in the time and trouble saved. The price is \$1.50.

If one wishes to make pinhole-pictures, one may buy for 60 cents an attachment which converts his camera into a pinhole-camera. A pinhole-picture is usually an artistic rendering of the subject and there are certain effects which can be obtained in no other way than by using the pinhole instead of a lens. See the examples in the July issue.

A telemeter is a little instrument which enables one to measure with accuracy the distance between the camera and the subject to be photographed. It has what is called a "sight-tube" and by looking through



BLACKBERRY-BLOSSOMS

THIRD PRIZE — SPRING-PICTURES

ALICE F. FOSTER

this and pointing it toward the object to be photographed the index-hand on the scale will point to the number of feet indicated on the scale as the correct distance. So exact is this little instrument that if one measures the distance with a rule he will find that the telemeter has given the distance correctly.

If one wishes to make stereoscopic views, one may buy for \$5.00 a stereographic attachment which will give the double image on the plate in the same manner and with as great accuracy as will the regular stereoscopic lenses, which cost many dollars more.

A device which makes rather amusing pictures is called the "Duplicator" and by its use one may get the picture of a person twice on the same plate in two positions. For instance, in the one position he may be taking a photograph and in the other he may appear as his own subject. This attachment costs only 25 cents and may be used on any camera. It may be turned so as to get the image on any portion of the plate one desires.

One more adjunct should not be overlooked and that is the little clamp which takes the place of a tripod. This attachment enables the amateur to fasten his camera to a fence or post or even to the branch of a tree and thus hold it solid when making a time exposure. It can be carried in the pocket and does away with the burden of a tripod. It is of special service to the tourist on an outing.

By the use of the various devices made for facilitating and simplifying one's work, besides the decrease in expense by their use, one may convert his ordinary camera into one of almost any character. The only thing is to learn to use each appurtenance with skill.

Here and There

DEVELOPERS vary greatly not only in their way of bringing out the image, but also in the effect they have

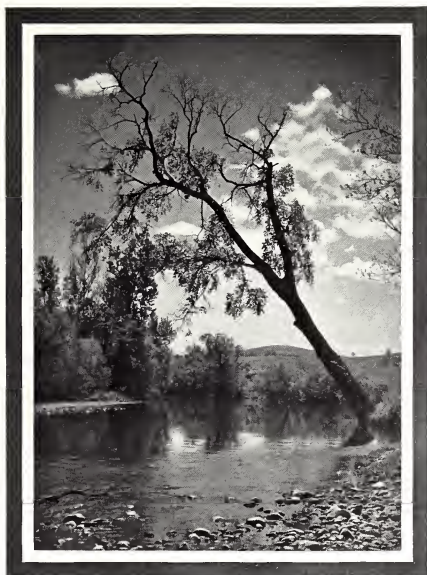
on producing a good-printing negative, the printing depending very largely on the color of the plate.

Some developers have a tendency to stain a plate, particularly if development is much prolonged. Sometimes, however, the staining occurs from lack of sodium sulphite in the developer. Stains, if noticed before the negative is dry, may be easily removed by placing the plate in the following solution: Alum, 4 oz.; muriatic acid, 2 drams; water, 8 oz. Let the plate stay in the solution till the stain has disappeared. If the plate has been dried, the stain is more obstinate. The negative must be soaked till the film is quite soft: then it is submitted to the clearing-bath and the stain will usually disappear after twenty minutes or so. Pyro is one of the developers which stains very quickly. A slight yellow stain on a pyro-developed negative does not injure it; in fact, it often improves the printing-quality of the plate. Too deep a yellow stain must be removed. A clearing-bath is made as follows: Citric acid, 1/2 oz.; ferrous sulphate, 1 1/2 oz.; alum, 1/2 oz.; water, 10 oz. The negative is fixed, washed, and placed in this bath until the stain has disappeared.

One sometimes sees on the edges of negatives a sort of iridescence, which, if not removed, gradually spreads over the whole plate. To remove this, rub the place with chamois dipped in alcohol, or a weak solution of Farmer's reducer. If the discoloration is not very pronounced it will not interfere with the printing, but it is likely to spread and injure the negative.

Slightly fogged, or, as they are sometimes called, "veiled" negatives, are cleared by placing them in a saturated solution of alum to which has been added a little hydrochloric acid in the proportion of 1/4 oz. of the acid to 5 oz. of the alum-solution.

Fogged or "veiled" negatives may also be cleared by using a solution of equal parts of glycerine and a satu-



rated solution of hypo. The negative is placed film-side-up in a tray and enough of the liquid poured over it to cover it well. If the plate is only slightly fogged it will take perhaps an hour's soaking to remove it, but if very dense it will take perhaps several hours. This solution will also remove local fog and halation.

Silver stains are perhaps the hardest of all to remove. A most effectual solution is made by mixing ammonium sulphocyanide and nitric acid. To every 2 ounces of water use 30 grains each of ammonium sulphocyanide and nitric acid. Wash the plate well after the stains are removed, put it for five minutes into a ten per cent solution of chrome alum, then wash well and dry. A slight stain of silver may sometimes be removed by rubbing the place with powdered pumice stone and then placing the plate in a strong solution of hypo.

Javelle water, which is made of chloride of lime and washing-soda, will often prove most efficacious in removing stains. This is a bleaching-solution, and one must watch the progress of its action carefully and take out the plate as soon as the stain has disappeared. The formula, for the solution is printed on the can of "chloride of lime," so it is not necessary to repeat it here. Ink-stains, if not of too-long standing, will bleach out in Javelle water; but if too deep use oxalic acid, a ten per cent solution being none too strong. Before placing the plate in the acid it is soaked in alum-solution.

Hydroquinone does not often stain the negative unless the plate is left in the solution too long. The stain may be removed after the plate is dry by applying to the stain a weak solution of Farmer's reducer, using a piece of absorbent cotton and rubbing gently till the stain

disappears. Sometimes in reducing plates the solution itself leaves a stain. This may be removed by placing the plate after reducing in a five per cent solution of sodium sulphite. Indeed, it is a good plan to place a plate in this solution after reduction has taken place.

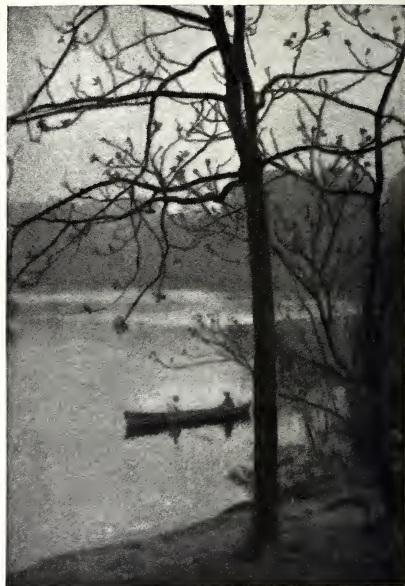
Mounting Bromide Prints for Framing

EVERY maker of bromide enlargements knows how difficult a matter it is to make a print lie flat in a frame without showing spaces here and there between glass and picture. To avoid such a fault the prints are first mounted on cloth stretched over a light frame something like an artist's stretcher. One may buy at the picture-shops strips for making such a frame so made that they do not need nitering to insure square corners. The frame is made the size of the print, a cloth stretched over it and tacked in place, wetting the cloth before attaching it to the frame so that it will dry taut.

The print itself is wet, the superfluous moisture removed with clean blotters and a coat of thin paste applied evenly to the back. The cloth itself is then coated with paste, rubbing it with the ends of the fingers, which is an easy way to insure an even coating. The print is then lifted by the lower corners, laid on the cloth and rubbed gently into place. The picture is next turned upside down and rubbed into perfect contact with a soft cloth.

Cheese- or butter-cloth will be found the best cloth to use; for, being loosely woven, the paste will ooze through it and can be removed so that the picture itself will be perfectly smooth when thus mounted. When dry, the picture is ready for framing, and without glass if one so chooses. Some prints look better unglazed.

A MAY EVENING
DR. D. J. RUZICKA
THE NEST
L. M. REIGHTMEYER
HONORABLE MENTIONS —
SPRING-PICTURES



The Round Robin Guild Monthly Competitions

*Closing the last day of every month.
Address all prints for competition to PHOTO-ERA,
The Round Robin Guild Competition, 383 Boyl-
ston St., Boston, U.S.A.*

Prizes

First Prize : Value \$10.00.

Second Prize : Value \$5.00.

Third Prize : Value \$2.50.

Honorable Mention : Those whose work is deemed worthy of reproduction with the prize-winning picture, or in later issues, will be given Honorable Mention.

Prizes may be chosen by the winner, and will be awarded in photographic materials of any nature advertised in PHOTO-ERA.

Rules

1. These competitions are free and open to all photographers, whether or not subscribers to PHOTO-ERA.

2. As many prints as desired, in any medium except blue-print, may be entered, but they must represent the unaided work of the competitor from start to finish, and must be artistically mounted.

3. The right is reserved to withhold from the competitions all prints not up to the PHOTO-ERA standard.

4. A package of prints will not be considered eligible unless return-postage at the rate of one cent for each two ounces or fraction is sent with the data.

5. Each print entered must bear the maker's name, address, Guild-number, the title of the picture and the name and month of the competition, and should be accompanied by a letter SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in letter.

6. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA. If suitable, they will be reproduced, full credit in each case being given to the maker.

Notice to Prize-Winners

These contests are open to everybody except those who have won three or more prizes. Such contributors, however, may continue to send work in a special class, as announced in "Our Illustrations" for June. Honors will be awarded only to pictures of exceptional merit.

Subjects for Competition

June — "Water-Craft." Closes July 31.

July — "Gardens." Closes August 31.

August — "Wood-Interiors." Closes September 30.

September — "Shore-Scenes." Closes October 31.

October — "Rainy Days." Closes November 30.

November — "Christmas Cards." Closes December 31.

December — "Home-Scenes." Closes January 31.

Awards — Spring-Pictures

First Prize : Marian White Little.

Second Prize : W. B. Morrison.

Third Prize : Mrs. Alice F. Foster.

Honorable Mention : F. R. Bronson, Carl H. Brown, Ward E. Bryan, Mrs. Charles S. Hayden, Peter Kirch, Inez D. Lashmatt, L. M. Reightmeyer, Dr. D. J. Ruzicka, J. Herbert Saunders, John Schork, M. D. Silberstein.

BEGINNERS' COLUMN

Quarterly Contests for Beginners

In these contests all Guild members are eligible PROVIDED THEY HAVE NEVER RECEIVED ANY PRIZES OR HONORABLE MENTIONS in the past, FROM ANY SOURCE, AND PROVIDED ALSO THAT THEY HAVE NOT BEEN MAKING PHOTOGRAPHS MORE THAN ONE YEAR.

All prints submitted, except prize-winners, will be returned if postage is sent in a separate letter with the data. See rules 4 and 5 in opposite column.

Prizes

First Prize : Value \$5.00.

Second Prize : Value \$2.50.

Third Prize : Value \$1.50.

Honorable Mention : Those whose work is worthy will be given Honorable Mention.

A Definition of the Beginner

COMPETITORS in the Quarterly Contests for Beginners will please take note of the strict definition of the beginner which has appeared in the last few issues of PHOTO-ERA. The tightening of the lines was made necessary by the fact that many contestants sent for these events work which was clearly the output of experts, thus taking advantage of the genuine beginners, viz., camerists of less than one year's experience.

Subjects for Competition

VACATION-PICTURES — CLOSES OCTOBER 15, 1911

It may seem that "Vacation-Pictures" is a pretty broad term, but the editors desire to give the real beginners a chance to enter any good pictures they may make during their summer holidays. For this reason it was decided to make the subject broad enough to include everything which might in any way illustrate the title. Thus, snapshots of landscapes, seascapes, figures, animals, buildings and any other objects which offer good compositions or interesting pictures may be included.

To get the greatest benefit out of these quarterly contests, each Guild-member who is thinking of entering any prints should undertake a little course of study covering the field in which he contemplates working. There are plenty of booklets for beginners, some on the photographic processes themselves and others on special fields, such as hand-camera work, marines, landscapes, and orthochromatic photography. These the clerks in the stock-houses will be only too glad to get for you. Technical excellence is necessary if the pictures are to have a chance of success. The negatives must be properly exposed and developed and the prints as good as you can make from them. But the intelligent worker will do more than make a good photograph; he will select his subjects with regard to the laws of composition and remember that some definite idea must be present in his mind to justify the exposure. Perhaps the easiest general rule is to secure simplicity by working close to the subject so as to get a large image and thus exclude extraneous objects, particularly such as would come out nearly white in the print and distract the eye from the principal object.

GENERAL — OUTDOORS — CLOSING JAN. 15, 1912

Any subjects, landscapes, figure-studies, genre, marines and animals.

GENERAL — INDOORS — CLOSING APRIL 15, 1912

Similar to the one above, but strictly interior-views.

Answers to Correspondents

Readers wishing information upon any point in connection with their photographic work are invited to make use of this department. Address all inquiries to ELIZABETH FLINT WADE, 743 East 27th Street, Paterson, N. J. If a personal reply is desired, a self-addressed, stamped envelope must be enclosed.

M. M. BARBER. — Pictures taken with a **Pinhole-Camera** may be entered in any of the competitions. If your negatives are made with the pinhole-camera it is well to make a note to that effect in your data. Any details in regard to your pictures must be written in a letter as the postoffice-regulations subject a photograph to letter-postage if the mount bears more than the name, address, and purpose for which the print is sent. Your prints should all be mounted and each one should bear the full name and address, so as to avoid the chance of their being lost.

CARL HEADLEY. — **A Uranium Intensifier** is made as follows: Make up a solution of nitrate of uranium, allowing 8 grains to each oz. of water, and a second solution of potassium ferricyanide, using the same proportions. To use, take equal parts of each solution and to each ounce add 2 drams glacial acetic acid. The plate is placed in this solution till the desired density has been reached, and is then well washed and dried. If the plate has been dried, it should be soaked for a while till the film is soft before intensifying.

ELLA DAWES. — **To Label Bottles** so that the label may be easily seen in the darkroom, use white enamel paint and letter the words directly on the bottle. The letters should be large and distinct. This is a very simple and effective way of marking a bottle, for the letters will not rub or wash off readily.

BEN. K. L. — **A Slow Reducer**, one which is not only effective but easily controlled, is made as follows: Potassium bichromate, 10 grains; sulphuric acid, 10 minims; water, 10 oz. The plate is left in this solution till the reduction is completed, and is then washed well and dried. Reduction takes place slowly, and this is therefore an excellent formula to use when reducing plates which need only slight reduction to clear up the shadows. Sulphuric acid is a dangerous poison and must be handled with care. In case one gets any on the hand apply oil at once. Carron oil is the most efficient — a mixture of lime-water and sweet oil. This stops the burning almost immediately.

P. H. EVANS. — **To Obtain an Engraving Black on Bromide Prints** use amidol for the developer. The following formula will be found to work finely: Sodium sulphite, 300 grains; potassium bromide, 5 grains; citric acid, 5 grains; amidol, 30 grains; water, 10 oz. Filter the solution before using so as to avoid spots on the prints. Amidol does not keep well in solution, so it must be mixed fresh. The image appears very quickly. Let the print remain long enough to gain the desired density, fix in plain hypo, wash well and dry. When dry, coat with artists' fixatif and you will have a very brilliant print of a beautiful black.

C. L. O. — **A Fluid Ounce** of water weighs 1 oz. avoirdupois weight, or 437.5 grains. The old saying that "pint's a pound the world around" holds good in weighing water, for what is called a wine pint of water weighs 16 oz. By imperial measure a pint weighs 1 1/2 pounds. Your formula gives the amount to be contained in the finished solution and not the quantity to be dissolved in the amount of the finished solution.

CHARLES T. — The trouble with your prints made on the **Water-Toned Sepia Paper** is that they were, in the first place, printed too deep and then developed in too strong a solution of hypo. Print till very faint detail shows in the highlights, then put in water of a temperature of 65°, and as soon as the development is deep enough transfer to a generous quantity of hypo, the strength of which should be 1 1/2 grains to each ounce of water. Overprinted photographs develop up a muddy brown and turn an unpleasant yellow tone in the hypo. This bad color is shown in the prints you enclose for examination.

S. L. LYMAN. — Instead of trying to coat glass with gelatine, **Use Your Spoiled Negatives**. Clear them from the blackened silver by immersing them in a solution of hypo and ferricyanide of potassium till the gelatine coating is clear. Wash the plates well in running water, the temperature of which should not rise above 65°. The cleared gelatine will receive any sensitizing solution. Plates cleared in this way are particularly fine for blue transparencies. The clearing solution is made by using 60 grains of hypo and 60 grains of ferricyanide of potassium to each oz. of water.

OWEN T. R. — **To Remove Varnish from Negatives**, soak them for a short time in methylated spirits, then rub gently with a tuft of absorbent cotton or a soft brush. If the varnish has been on long and does not remove easily, add a little ammonia to the spirits, then rinse in clear spirits and dry. It is not necessary to varnish one's negatives. It is not only quite a bit of work to do so, but unless one is an expert in applying the varnish it does harm rather than good. Protect your plates by storing them in the manila envelopes made for this purpose.

JOS. SCHWICKRATH. — **To Letter Negatives** so as to have the title appear white on the print, use waterproof ink and a fine drawing-pen and write or letter the title in the shadows, choosing either the lower left or the lower right corner. To have the lettering black, use a fine etching-needle and scratch through the film to the glass, choosing a highlight or dense part of the negative. Of course one understands that the letter made on the film must be done backward so that the title will appear right in the print.

ANDREW F. G. — The print which you enclose would look much better made on **Rough Platinum**. The masses of lights and shadows are too broad for the smooth paper which you are using and that is the reason why your print lacks quality. On rough paper and printed in black and white the print would resemble a charcoal drawing. **Use Muriatic Acid to Clear your Platinum Prints** instead of acetic. The proportion is 1 oz. of acid to 60 of water. Two baths should always be used, or more for many prints.

FRANCES EMORY. — **Tabloid Developers** are chemicals put up in the form of tablets or lozenges. The chemicals are specially prepared and pressed into small tablets. One may buy not only developers in tabloid form, but also toners, hardening and clearing-tablets, fixing-salt, sensitizers and intensifiers. The tabloid form of photographic chemicals is specially to be commended when one is traveling, as they take up very little room and are ready for use with the addition of water.

H. N. B. — The competitor is **Not Limited as to the Number of Prints** he may send to the monthly contests. It is, however, wiser to send two or three well-finished prints than a dozen indifferently done. Great care is taken in the handling of the prints, but to insure their safety they must be mounted and each print marked on the reverse side with name and full address of the sender. Any print stands a much better chance of winning a prize if it is well finished.

JANE I. A. — The Greenish Tone of Your Gas-light-Prints is doubtless due to too much bromide in the developer. Make a few experiments and find the time of exposure for normal development, then you need not use the restrainer to hold back development. Have the negative always at a uniform distance from the light, and when you have ascertained the correct time for making a print of a certain negative, note the time on its envelope; then when you wish to make a print at some future date the correct time is there for its exposure.

D. S. WELLS. — You Can Buy Blue-Print Paper by the yard, a roll ten feet long and twenty-five inches wide costing only \$1.20. This paper is very useful for making a pictorial record of your work, what one might call a pictorial index. If one makes the blueprint when the plate is first finished he has at once a record ready to slip into his book. The book itself may be made of sheets of manila paper folded and sewed into place. Prints need be pasted only at the corners. Each print should bear the number of the negative from which it is made, so that it is an easy matter to find either the one or the other. Aside from the usefulness of such a book, it is very interesting to note the progress of one's work pictorially. See the article on System in this number of the Guild.

G. L. FROST. — To Secure an International Copyright must comply with the laws of the "country of origin." The "country of origin" is the country where the idea originated or the country of first publication. **An Orthoscopic Lens** is really a rectilinear lens, though a lens of this kind is not always quite free from distortion. The name was given to an early make of lens which was intended for architectural work, but the great improvement in the lenses now used makes even the cheaper grade better than this one of old time make. I should advise you to buy a later make of lens even though this one is, as you say, very cheap.

Print-Criticism

Address all prints for criticism, enclosing return postage at the rate of one cent for each two ounces or fraction thereof, to ELIZABETH FLINT WADE, 743 East 27th St., Paterson, N. J. Prints must bear the maker's name and address, and should be accompanied by a letter, sent separately, giving full particulars of date, light, plate or film, stop, exposure, developer and printing-process.

THE SHOWER. L. T. R.—Unlike most pictures bearing this title, this one does not represent a street with pedestrians hurrying along with umbrellas, but a wide church-porch in which three persons—two young women and a child—have taken shelter from a passing shower. The picture was taken from the inside of the porch looking out into the street, so the figures are mostly in shadow except the one who, clad in a light gown, is peering out into the street. One sees in the middle-distance and rather dimly defined two persons walking under an umbrella and there is a mistiness in the outlook which conveys the impression of rain as well. This picture is very well composed showing that the amateur had trained himself to take advantage of interesting picture-situations and is an adept in the handling of his camera. This picture has good illustrative value but would be better brought out on a smoother paper. Although there are some minor defects in the

picture, when one considers the circumstances in which the exposure was made, it is seen that these could not well be avoided. Another picture by the same artist is a seacoast-scene, which, though it has very little originality in treatment, is excellent in technique and composition.

THE WRECK. L. R. N.—This picture shows the wreck of a railroad train and is a good sharp photograph of what was a very disastrous railroad smashup. Although this picture has little artistic merit, it is a good "news picture" for it is the sort that the illustrated papers like to get hold of. There is little to be said of this print in the way of criticism for the technique is particularly good, just what it should be in a picture of this kind. The amateur was on the spot with his camera and succeeded in making a very graphic picture. The point of view was well chosen, the road lying at the bottom of a ravine or "cut" and the lines of the incline and the lines of the distant hills are so in harmony that one must accede artistic conception as to line and balance if not a subject which tends to artistic arrangement. Such a picture as this of the wreck has commercial value and an amateur who can make this class of pictures well is sure to get a good price for his work.

THE LITTLE STUDENT. R. T. L.—This is a picture of a little girl seated at a table and bending over a big book, evidently a dictionary or an encyclopedia. The pose of the child is very good and the modeling excellent; indeed, one seldom sees in a photograph a better counterfeit presentment of arms and hands. The fat little fingers of the right hand are thrust between the leaves of the book as if the tiny reader was about to turn over the pages, and the light and shadow are so well managed that the idea of flesh is almost as well conveyed as if the picture was painted. The fault of this picture (and, indeed, of many of its kind) is the immense bow of white ribbon which ties back the hair at the side. This makes a strong highlight to which the eye is at once attracted. The bow itself is all right but should be in a low tone, scarcely lighter than the hair. This fashion of dressing children's hair with large bows is very "fetinging," but when the bow is a pale blue or dainty pink it comes out white in the photograph and makes an unpleasant blotch in the picture. A ribbon of soft brown, not too dark, will give a very pleasing tone and will be decorative without being obtrusive.

ON THE BEACH. H. G. S.—A figure of a young woman lying on the sands at the seashore is the subject of this picture. She is gowned in white and her head is partly shadowed by a white parasol. A big hat adorned with an immense white plume lies in the foreground. The interesting feature of this picture is in the arrangement of the lines: the line of the figure, that of the beach and that of the low-lying clouds are all on the same plane. The fault of the picture is really the big hat, which seems so out of place in a locality of this kind. One involuntarily wonders if the "curl" will not have vanished from this pompous feather by the time its owner is ready to pick it up. The tones in the print are all very light and the impression of white sands and a sunny day are very well conveyed.

GOOD TIMES. B. A. J. This picture hardly needs a title to tell what it is, for it shows a group of happy youngsters wading in a big pool such as is made for children's recreation-parks in large cities; indeed, this looks very much like a wading-pool in Buffalo to which hundreds of children daily resort during all the long summer time. The water is shallow, the bottom of the pool of smooth cement and even the tiniest mite need not fear to venture far from shore. It is quite a knack to get a good picture at a place of this kind, for either the youngsters are all interested in the camera and per-

sistently stare at it and the artist, or else the children are so many that one gets only a confused grouping. In this case the artist has succeeded not only in placing a small group well on the plate, but has chosen his point of view to include the curve of the basin without making an awkward line in the picture. This is a very small print, but the detail is so good in it and the merit of the picture so far above the average of such scenes that it would repay making enlargements from the negative.

THE RIDERS. N. W. E. — A half-dozen equestrians coming along a park bridle-path is the subject of this picture. The technique is excellent and the picture itself is well finished and mounted. The fault is in the point of view. The horses appear coming directly toward the spectator and as a consequence the heads and shoulders of the animals seem out of proportion, so much so that it quite spoils the picture. In photographing such a subject one should stand at one side of the path and a little way from it and take the riders more at an angle. To group six on a plate and do it well is a very hard matter, but one may have two or even three, and if he is quick enough with eye and camera to take them just at the right moment will get a picture which may be of interest. Three other pictures submitted by this member are of landscapes, the technique in each of which is excellent but none of them has any special artistic merit.

A HAZY MORNING. C. L. H. — This picture shows the edge of a stream bordered with trees and at the side a path leading off into the fields. This is what one must call an impressionistic picture, for there is no

detail even in the objects in the foreground. The artist has, however, been very clever in his composition, for the shapes of the objects are so well arranged in balance and line that the picture has much merit even though it lacks detail. One special feature which really is the making of the picture is the cloud-effect. The clouds, like the trees, the stream, and the path, are "hazy," but light is breaking through at one point and, reflected in the stream, gives character to a scene which would otherwise have been without interest. The finish of the print adds to its good qualities, the tone being a soft gray, the mount itself being only two or three tones darker than the darkest tone of the print. The wide margin of the mount gives the effect of breadth to the picture.



A SUBSCRIBER recently sent us a club-offer for a number of magazines, including PHOTO-ERA. At the same time he wrote as follows: —

PHOTO-ERA, Boston, Mass.

Gentlemen: — In renewing my subscription to PHOTO-ERA, I wish to say that I consider it the BEST photographic magazine published. I am always eager to receive the next number, and to say that I am pleased with it would be putting it too mildly.

Wishing you continued success, I am,

Very truly yours,

(Signed) CHARLES W. WEIR.

Plate-Speeds for Exposure-Guide on Opposite Page

Class 1/3
Lumière Sigma

Class 1/2
Barnet Super-Speed Ortho
Iford Monarch
Seed Gilt Edge 30

Class 3/4
Barnet Red Seal
Defender Vulcan
Iford Zenith
Imperial Flashlight
Eastman Speed-Film
Seed Color-Value
Wellington Anti-Screen
Wellington 'Xtra Speedy

Class 1
American
Anso Film, N. C. and Vidil
Barnet Extra Rapid
Barnet Ortho Extra Rapid
Barnet Studio
Cramer Crown
Defender Ortho
Defender Ortho, N.-II.
Ensign Film
Hammer Special Extra Fast
Imperial Special Sensitive
Imperial Non-Filter
Imperial Orthochrome Special
Sensitive
Kodak N. C. Film
Kodoid
Lumière Film
Magnet

Premo Film Pack
Seed Gilt Edge 27
Standard Imperial Portrait
Standard Polychrome
Stanley Regular
Wellington Film
Wellington Speedy
Wellington Iso Speedy

Class 1 1/4
Cramer Banner X
Cramer Instantaneous Iso
Cramer Isonon
Cramer Spectrum
Eastman Extra Rapid
Hammer Extra Fast
Hammer Extra Fast Ortho
Hammer Non-Halation
Hammer Non-Halation Ortho
Seed 26x
Seed C. Ortho
Seed L. Ortho
Seed Non-Halation
Seed Non-Halation Ortho
Standard Extra
Standard Orthonon

Class 1 1/2
Cramer Anchor
Lumière Ortho A
Lumière Ortho B

Class 2
Cramer Medium Iso
Iford Rapid Chromatic
Iford Special Rapid
Imperial Special Rapid
Lumière Panchro C

Class 2 1/2
Barnet Medium
Barnet Ortho Medium
Hammer Fast
Seed 23

Class 3
Wellington Landscape

Class 4
Stanley Commercial
Iford Chromatic
Iford Empress
Cramer Trichromatic

Class 5
Cramer Commercial
Hammer Slow
Hammer Slow Ortho
Wellington Ortho Process

Class 8
Cramer Slow Iso
Cramer Slow Iso Non-Halation
Iford Ordinary

Class 12
Cramer Contrast
Iford Half-tone
Seed Process

Class 100
Lumière Autochrome

Exposure-Guide for August

COMPILED BY MALCOLM DEAN MILLER, A.B., M.D.

Exposure for average landscapes with light foreground; river-scenes; figure-studies in the open; light-colored buildings and monuments; wet street-scenes, with stop F/8 (U. S. No. 4) on Class 1 plates.

For other stops multiply by the number in third column.

Hour	Bright Sun	Cloudy-Bright	Cloudy	Dull	Very Dull			
9 A.M. to 3 P.M.	1/32	1/16	1/8	1/4	1/2	F/4	U. S. 1	× 1/4
8 A.M. and 4 P.M.	1/25	1/12	1/6	1/3	2/3	F/5.6	U. S. 2	× 1/2
7 A.M. and 5 P.M.	1/16	1/8	1/4	1/2	1	F/6.3	U. S. 2.4	× 5/8
6 A.M. and 6 P.M.	1/6	1/3	2/3	1 1/3	2 2/3	F/7	U. S. 3	× 3/4
						F/11	U. S. 8	× 2
						F/16	U. S. 16	× 4
						F/22	U. S. 32	× 8
						F/32	U. S. 64	× 16

The exposures given are intended merely as a basis for trial, and will vary with latitude and other conditions, but they should give very full detail in the shadows. The exposure for ortho. plates on blue-green foliage can be determined only by trial; but it is usually rather long on account of the comparative insensitiveness of such plates to this particular color. Full exposure and a diluted developer are recommended for all summer work.

SUBJECTS. For other subjects, multiply the exposure for average landscape by the number given for the class of subject.

- | | |
|---|---|
| <p>1/8 Studies of sky and white clouds.</p> <p>1 1/4 Open views of sea and sky; very distant landscapes; studies of rather heavy clouds; sunset and sunrise studies.</p> <p>1 1/2 Open landscapes without foreground: open beach, harbor and shipping-scenes; yachts under sail; very light-colored objects; studies of dark clouds; snow-scenes with no dark objects; most tele-photo subjects outdoors; wooded hills not far distant from lens.</p> <p>2 Landscapes with medium foreground; landscapes in fog or mist; buildings showing both sunny and shady sides; well-lighted street-scenes; persons, animals and moving objects at least thirty feet away from the camera.</p> | <p>4 Landscapes with heavy foreground; buildings or trees occupying most of the picture; brook-scenes with heavy foliage; shipping about the docks; red brick buildings and other dark objects; groups outdoors in the shade.</p> <p>8 Portraits outdoors in the shade; very dark near objects, particularly when the image of the object nearly fills the plate and full shadow-detail is required.</p> <p>16 Badly-lighted river-banks, ravines, glades and under the trees.</p> <p>32 Wood-interiors not open to sky and with dark soil or pine-needles.</p> <p>48 Average indoor portraits in well-lighted room, light surroundings, big window and white reflector.</p> |
|---|---|

PLATES. When plates other than those in Class I are used, the exposure indicated above must be multiplied by the number given at the head of the class of plates.

THE CRUCIBLE

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With Reviews of Foreign Progress and Investigation

Conducted by MALCOLM DEAN MILLER, A.B., M.D.

Readers are encouraged to contribute their favorite methods for publication in this department
Address all such communications to The Crucible, PHOTO-ERA, 383 Boylston Street, Boston

Preventing Pyro-Stains

STANLEY ROBERTS, in *The Amateur Photographer*, gives the following method for preventing pyro-stains on the fingers: "During development, keep the tap running, and have by the side of the developing-dish a bowl containing a weak solution of hydrochloric acid (about 1 in 50). Now observe the following: Never, never dip dry fingers into the developer; rinse both before and after, and immediately the plate is immersed in hypo rinse the fingers again and dip them into the weak acid. That is all. I have developed hundreds of plates in pyro, and never had my fingers with the suspicion of a stain since following this method; the acid, being so very dilute, did not have any deleterious effect on the skin."

Mixtures for Backing Plates

A WRITER in *The Amateur Photographer* collects a number of formulas for plate-backing. We abstract some of these for reference, because there are many occasions when double-coated plates are not available and when a backed plate may be needed. Of the caramel mixtures, the following is most generally useful:

Caramel	1 ounce
Lampblack	1/4 ounce
Water	2 ounces
Wood alcohol	2 ounces

In an emergency, Indian Red water-color paint thinned with wood alcohol will answer well. Soap may be used as a basis, as follows:

Best white Castile soap	1 ounce
Wood alcohol	20 ounces
Erythrosin	1/4 ounce
Aurine	1/4 ounce

The requirements for a good backing are too varied to describe in detail, but the chief of them, viz., the same refractive index as the glass and optical contact with it, are sufficiently well attained by the kinds given above. If any of these is applied thickly and allowed to dry well before loading the plates, a great improvement will result. Not only will there be practically no halation, but the fine gradations throughout the plate will be better held in the print. The English use backed plates very extensively, whereas we prefer double-coated brands for similar results.

Regarding Exposures

A SUBSCRIBER writes that our exposure-table is not reliable, because he gave 1/100 sec. when the table called for 1/50 sec. and got overexposure. This criticism is interesting, particularly when one remembers that there are several points at which mistakes may be made. For instance, the marked 1/100 (unless on one of the newest and most expensive shutters) was probably about 1/30 or 1/40. In the second place, our critic may have misjudged the subject. Thirdly, the particular

batch of his regular brand of plates may have been twice as fast as the average. Again, he might have used the wrong stop. All these factors vary so widely that any table must be merely an approximation, and, as stated in ours, a guide to the first trial. Development of a few test-exposures will tell what allowance to make. The table is purposely arranged to give what we call very full exposure, though some snap-shooters might call it overexposure. If it is too slow for them, let them try giving half the exposure (faster speed or smaller stop) and see if it suits them better on development.

The Effect of Color-Filters Upon the Definition of a Lens

IF color-filters be used with a lens, says Dr. C. E. K. Mees, it is clear that considerable attention should be paid to the optical accuracy of those filters, so that they do not introduce aberrations which may affect the definition of the image. Apart from the accuracy of the glass itself, distortion may be produced in color-filters in the course of their manufacture in several ways.

In the first place, if the filters are prepared by coating colored gelatine upon the glass, then when this gelatine dries it will contract and bend the glass; also, when the filter is cemented with Canada balsam, too rapid drying or drying at uneven temperatures will distort the filter; while, finally, if pressure is exercised upon a thin filter in its cell, the filter may easily be permanently strained. If these strains were symmetrical they would be of small importance, as they would simply produce a lens of slight positive or negative power, and so, to a small extent, change the focal length of the lens with which they are used. But generally they are either in one direction only, or are much greater in one direction than in the other, and so produce a cylindrical lens, which introduces astigmatism. The effect of such aberration naturally becomes much greater as lenses of longer focal-length are used, the effect varying as the square of the focal-length of the lens, so that a filter which would be perfectly satisfactory on a hand-camera-lens of six-inch focus, would be with a telephoto combination quite useless. With medium- and high-power telephoto lenses only filters of the highest optical accuracy can be used.

This point must be carefully borne in mind, in view of the recent introduction of what may be termed semi-telephoto lenses, such as the Cooke Telar, which naturally require that a filter should be far more accurate than would be assumed to be necessary for its diameter.

The aberrations of filters can be minimized by making them of as thick glass as possible, having regard to its optical accuracy, and for filters of the very highest quality it is usual for the two glasses to be about five millimeters in thickness.

In this connection, it may be well to remark that there are on the American market several makes of filters which are quite reliable for all ordinary work — and at moderate prices. It pays to buy the best, particularly for use with a high-grade anastigmat.

MUNICH SCHOOL OF PHOTOGRAPHY

MAX A. R. BRÜNNER

SOME weeks ago there took place an event to which great importance is attached in the German photographic world — the opening of the new premises of one of the best photographic schools in Europe, that of the "Teaching and Experimental Institute for Photography, Chemigraphy, Autotype and Gravure" at Munich. An endless row of carriages took the guests to the fine new building in the Clemensstrasse, among whom were the Bavarian Court, several ministers, including their president, representatives of the City of Munich, of the Technical College, of the Academy of Arts, of the Royal Library, the Polytechnic Society of Arts, and of several photographic clubs, amateur as well as professional.

The president of The South German Photographic Society, to whom the institute belongs, Mr. Franz Grainer, opened the brilliant ceremony by an address. He

behalf of the Institute. Numerous telegrams of congratulation arrived, and various photographic firms, clubs and individuals presented valuable objects to the museum, which is now being organized and which is, perhaps, the only photographic museum in the world. Most of the presents are of great historic interest.

We will now give a brief description of the new building itself. The ground, which has been given free for twenty years by the City of Munich, is valued at about \$2,400 rental per year. \$33,300 has been given by the Bavarian government and \$4,760 by friends of the Institute. There are no less than ninety rooms, among them two skylight studios, four modern drawing-room studios, one reform studio, seven darkrooms, several laboratories and studios for enlargements and reproduction, the departments for copper-etching and autotype, and of photography for criminal investigation, rooms for testing materials, photochemical laboratory, Roentgen department, draftsman's and printers' rooms, library, collection of objects for instruction, etc. The ordinary glass-box



THE MUNICH SCHOOL OF PHOTOGRAPHY

thanked the Government, the City of Munich and many other friends of the school for their contributions and other assistance which made up a sum of \$8,000 every year, or over \$25,000 since the foundation of the Institute, which took place eleven years ago. The latter is the product of self-help and is, at the same time, the transformation of large sums for the purpose of professional teaching alone. In other words, this Society has considered it its honor and duty in the interest of our profession, during the past eleven years, not to pile up money, but to utilize it for the teaching of photography by means of the school. The latter had to fulfil its high mission in rather narrow quarters during the past decade, but now a splendid building has been completed, much larger than the old one and equipped in the most modern manner. This is now being turned over to the director, Professor Emmerich, who also spoke.

Besides these two much-applauded speeches, several others were made and a banquet was given in true Bavarian style. The new building was inspected by the several hundred guests who were present. As is usual in Germany, a number of orders, medals, titles, etc., were conferred on those who had done meritorious work on

for taking portraits is becoming a thing of the past in Germany, while the drawing-room studio, viz. without top-light, draws an ever-increasing following. The largest is the so-called Reform-studio, which, besides a high sidelight, possesses a strip-skylight two meters wide. Here, indeed, are all advantages of the two kinds of studios combined. There is a wonderful graduation of the intensity of light from the window towards the opposite wall, even without moving the curtains. It is also possible to exclude the top-light. The darkrooms are provided with the so-called labyrinth-entrance, i.e. you have to pass three doors and a partition when entering or leaving during the day-time, yet no detrimental light falls upon working-tables. The doors are not locked, people go out and in. All rooms are lighted by electricity; gas is used for heating-purposes only. The whole building is well ventilated; in some rooms, besides, there are special fans; where necessary you can obtain hot or cold water. The designs of the numerous varieties of apparatus are of the latest pattern and it is certainly a pleasure to work in such a well-equipped institute. Munich has received a new point of interest for sightseers and appreciates it highly.



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OUR ILLUSTRATIONS

Edited by WILFRED A. FRENCH

OUR cover-illustration this month by G. Edwin Keller, of Buffalo, is a charming summer-scene, full of atmosphere and the sense of distance. The composition is perfectly balanced and the rendering of values good.

The frontispiece shows a strikingly effective head of a young girl, by Duehrkoop, the eminent German *Lichtbildner*, now on a visit to this country. It is a bold, vigorous impression suggestive of a decorative, symbolic design rather than of a charming feminine characterization, such as mark the artist's customary portraits. His mastery of technique and, particularly, the correct rendering of flesh-tones are here well exemplified. The common mistake of eradicating every trace of the natural structure of the neck, including the two prominent muscles and the little hollow at the base of the neck, by senseless retouching, as though they were physical deformities, is studiously avoided at the Duehrkoop studios. Data: 8 x 10 Seed plate; Zeiss Tessar lens; about 19-inch focus; used at full opening; June, at noon; 6 seconds; Edinol developer; Trapp & Muench Matt-Albumin print.

John M. Whitehead's pictorial work, as exemplified in this issue, fully justifies the praise accorded it by competent judges. Its merits have not been too strongly emphasized in Mr. Findlay's appreciation. Mr. Whitehead is a devotee of "straight photography." Those of our readers who were under the impression that PHOTO-ERA had become a convert to the school bereft of outline and detail will be reassured; and while they will be captivated by these fine examples of painstaking and finished technique, there doubtless will be others who will find in them less to admire than in those which are less articulated. As a student of moonlit-landscape, Mr. Whitehead has few, if any, equals. He has studied night, and the edge of night, for many years, so that he may be regarded as an authority on the subject. He has set an example, worthy to be followed, of thought, patience and perseverance — eminent attributes of the Scottish character. His "Moonrise," page 68, should merit careful study; those who would criticise its atmosphere, shadows, perspective and detail should first consider their own experience — or lack of it — in this particular field. This picture suggests the possibility that the artist has studied Whistler's Nocturnes.

Poetic suggestion as well as simplicity and directness of pictorial design conspicuously mark the landscapes, pages 62 and 64. Not the least of their technical excellences is the separation of planes. The chord struck by "Tempest-Riven," page 65, stirs the imagination as few pictures of this nature probably have ever done. It is a tragedy, complete in itself, filled with the thrilling details of hope, suffering and death. The woodland idyl, page 61, transports the observer into a region of calm, reverie, and wistful beauty. Who can cavil at the plainly-indicated character of the splendid tree-trunk or other delightful concomitants of a forest-scene? Clearly one does not wish to have one's vision hurried in coming to enjoy Nature's offerings! On the other hand, in a view affording a great expanse of land and sky, as in "The Distant Toon," page 67, the all-seeing eye of the lens is judiciously curbed and adjusted to the subject.

The floral spray, page 60, is one of the most successful botanical studies PHOTO-ERA has ever had the pleasure to publish. The various delicate gradations of light and shadow on the petals and the leaves — which correspond to the modeling in the human face, in portrait-

ure — are beautifully rendered. All this is due to the choice of apparatus and materials and their intelligent use; also to proper lighting, exposure and chemical manipulation. What a simple thing to photograph only just a flower or a spray of blossoms! Thousands attempt it, of course without the slightest knowledge of how even to begin the task, and so, naturally, fail. The pity is that they do not realize how miserably they have failed. Let them get out their flower-pictures and institute a comparison.

When conditions are right, very pleasing portraits can be made in the open — soft, round, well-modeled and with transparent shadows. This is demonstrated by the portrait on page 69. Its author, Louise Baynes, is strictly an amateur practitioner. Data: 6 1/2 x 8 1/2 Telephoto-Poco Camera; Voigtlaender and Son's Collinear, Series II; used at full opening; outdoors; September, 5 P.M.; light, dull; 4 seconds; Cramer Inst. Iso.; Mitchell's Celeritas developer; Portrait Argo print, enlargement from 4 x 5 negative.

Our insert this month is an effective decorative design, by that sterling pictorialist, Louis Fleckenstein, now a successful portrait-practitioner in Los Angeles. The action of the figure is bold and striking, and yet entirely natural. The lower part of the body is, unfortunately, merged into the background, no line of demarcation being visible. Otherwise the effect of relief against the vague and somber setting is praiseworthy. Data: July, 4 P.M.; diffused light; P. & S. Semi-Achromatic lens; 16-inch focus; stop, F/16; 1/2 second; Standard plate; Rodinal; carbon print.

The portrait of an old lady, by Frank Scott Clark, page 74, demonstrates that artist's contention that flesh should be represented as a luminous surface. No attempt has been made to meddle with the sitter's physical characteristics. The noble, finely-modeled head, so expressive in its portrayal of old age, and the wrinkled hands have happily escaped the falsifying hand of the retoucher. Though strongly lighted, the head and hands are correctly rendered as to color-value, and not even the strongest accents of light, including the silvery hair, approach the extreme whites of collar and cuffs. Data: 11 x 14 Studio Grand; Voigtlaender and Son's Portrait-Lens (old construction); 18-inch; F/6.3; window-light; exposure, "quick"; Eiko-Hydro; W. & C. sepia print.

The portrait of the young girl, by Mary Camell, page 75, is an illustration of medium lighting. Although a blonde, her evidently fair complexion has been rendered justly by the modeling in the flesh-tones, which is all in a high key. The white drapery also retains its original character, but, together with the exposed chest, it has been judiciously lighted, so as to harmonize and perform its share in the balance of the composition. Notice, too, that the physical structure of the neck has been preserved. No doubt the model, evidently of a petite type, would not have it otherwise.

Perfection and elegance of technique is a characteristic feature of The Bradley Studio. Hence, one expects a true presentation of all color-values from this exemplary portrait-establishment. Mr. Bradley begged the editor's indulgence, being too busy to frame an adequate reply to his letter and asking that a specimen of his customary work be accepted instead. See page 76. The management of the light drapery, and other parts of the costume, with their full range of delicate grada-

tions, is masterful. Unfortunately, the halftone-reproduction, prepared during the hot spell early in July, is below our standard and but faintly suggests the differentiation in values between the lady's complexion and her bright costume.

Mr. Fleckenstein's pictorial contribution to the symposium, page 77, is a strongly individualized portrait of O. Von Rosenberg, the painter. While fully appreciating the hand as an aid in determining human character, we think that in this case the member is a trifle too insistent. It might well have been subordinated and still fulfil its helpful mission. The body of the man is also a bit obscure, and unnecessarily so; but the face is unmistakably expressive—whether the portrayal of a temporary mood or a habitual play of features.

The portrait of the young woman, by George H. Hastings, page 78, exemplifies the author's method of lighting and placing the accents where they rightfully belong. Assuming that the forearm and hand harmonize with the facial complexion, they are represented lower in tone—just as they appear on the ground-glass. Had they been lighted more strongly, the effect would have destroyed the balance of the composition. The lines are extremely artistic and the pose worthy the reputation of the founder and first president of the Photographers' Association of New England.

That J. H. Garo does not confine his talent as a delineator of human character to portraits of adults is shown by his picture of a boy on page 79. The juvenile portion of his exclusive clientèle keeps him busy a large part of the time. Mr. Garo says little regarding the relative color-value of flesh-tones; but, being a sane and conservative artist, he is satisfied to represent human beings as they appear under normal conditions.

Miss Reineke's portrait, page 80, conforms to her expressed opinion that the human face, in a photograph, should be in a key low enough to represent correctly the original color-values.

Mrs. Kaesebier treats the matter of lighting very broadly and with fine judgment. Certain conditions which cannot be conveniently changed sometimes yield results which are not entirely consistent; however, in the photographic studio, which is provided with overhead and side light, almost any kind of lighting is possible, and the operator exercises his individual preference. The effect of the illumination of the subject, page 81, is in harmony with the costume, which is light. In spite of the high key adopted here, the artist has produced a harmonious tone-quality, and, while the light plays strongly upon the face, the latter is still in proper contrast to the highest lights in the picture.

The profile, page 82, is well modulated in light and the values are logically presented, even to the shirt-collar, which, eminently of a sensible style, has been discarded by the younger men in favor of the high, obtrusive and characterless pattern.

The group of N. E. Association officers is less artificial and forced in arrangement than many similar efforts which we have seen. The scene here portrayed is actually a conference, and shows the skill of a master craftsman.

The portraits of pictorial workers, pp. 86 and 87, are arranged quite perfunctorily, and are not intended to serve an artistic scheme. They have been referred to elsewhere in this issue.

Our Monthly Competition

The contest of "Spring-Pictures" seems to have received adequate appreciation from our Guilders, and the contributions were almost evenly divided between simple landscapes and landscapes with figures. The latter obviously require a higher degree of skill and imagination to produce than the other sort.

The group, page 90, is strikingly pleasing and significant. The moment selected by the camerist shows easy, natural action, convincing force and artistic lines. The figures are well placed, while there is a comforting absence of annoying accessories. Data: May, 4 p.m.; full sunlight; bulb-exposure; film; pyro; 6 x 10 bromide.

The insinuating softness of outline and atmosphere, so peculiar to the spring, has been admirably presented in Mr. Morrison's landscape, page 91. As a composition it seems to possess no shortcomings; in fact, it is a picture which almost any intelligent picture-lover would covet. The Corot-like quality of impression is due largely to the printing-medium—gum—in which the artist professes to be but a beginner. Nevertheless, it is a very successful effort, and we advise the author to continue his acquaintance with the process. Data: spring of 1910; 11 a.m.; light, dull; just beginning to rain; Goerz, series III; used rear-combination, about 14-inch focus; stop F/12; 3/4 second; Cramer Medium Iso., with ray-screen; pyro; gum-bichromate; printed three times; the proportions of pigment for first coating being three parts sepia and one part black; second coating sepia and black half and half, and printed less than the first printing; third coating one part sepia and two parts black, printed just enough to strengthen the shadows. Mr. Morrison has consented to write a paper setting forth his experiences with gum, meager as they are! This will appear in an early issue of PHOTO-ERA, probably in an early fall number.

A scene at the edge of the woods, when spring-flowers greet the eye, produces a grateful sensation. Modest and simple, Mrs. Foster's picture of a sylvan retreat, dotted with blackberry-blossoms, is a pleasing addition to this prize-collection. Data: May, 5.45 p.m.; dull light; Goerz lens; 8 1/4 inch focus; Standard Ortho-nor; tank, pyro; Azo, Grade E.

Though a strikingly picturesque motive, the river-scene, page 93, contains defects common with camerists of short experience. The ray-screen used was of too dense a color, giving the blue of the sky too deep a shade. The clouds, while generally a pleasing feature in a landscape, in this case are badly placed. The picture is also not well spaced; it could afford to lose a portion off the top; the tree in the foreground is too aggressive, and, on the whole, a view of the subject made horizontally, increasing the space at the left, might yield a picture of more harmonious proportions. Data: April, 1910; bright light. Seed D.-C. L Ortho; medium ray-screen; Goerz Dagor No. 0; 5-inch focus; stop F/8; 1/2 second; pyrocatechin; 2 3/4 by 3 3/4 Special Velvet Velox.

The buds in the trees seem to be the only obvious sign of spring in Dr. Ruzicka's picture, page 94. Oddly enough, this scene was depicted towards evening. A spring-day, like almost any other day, has its moods, but we prefer a more cheerful hour. The camerist, whom we have discovered to be an artist—as a collection of his prints to be seen in an early issue of PHOTO-ERA will demonstrate—is a man of sentiment, and this particular picture may have awakened in him emotions not manifest in the camera-impression. The Japanese decorative effect of the composition is strangely pleasing. Data: May, 6 p.m.; hazy; Heliar Reflex Camera; Heliar lens; stop F/8; Cramer Ins. Iso.; 1/20 second; Rodinal, platinum print through tracing-cloth.

Among the many prints entered in this composition, there was but one of a bird's-nest, and it pleased the jury. Though presenting no manifest difficulties, the subject is very attractive with its setting of shrubs and vines. Data: May, 5 p.m.; diffused light; 5 x 7 sym. lens; F/32; Century Camera; Cramer Iso. plate; 6 seconds; pyro; 3 1/2 by 4 1/2 Special Rough Velox.

ON THE GROUND-GLASS

A Correction

THE flashlight-picture representing a young lady pouring tea, published in the April PHOTO-ERA, was erroneously attributed to the editor, whereas, in reality, the author of the negative is Mr. W. S. Davenport, formerly of Boston, but now residing in Germany.

Our Symposium

THE collective opinion of men and women prominent in American portraiture concerning the familiar topic as to whether the human face shall appear as white as chalk or as dark as coffee in a photograph—presented in this issue—will be read with interest by the professional and the amateur alike. It may be argued that every photographer with any sense at all knows that the human skin, even the whitest complexion, is many degrees lower in tone than a shirt-collar; and yet the average practitioner insists on representing the face, hands, neck and bosom just as glaring white as virgin snow, and there are practitioners posing as artists and charging exorbitant prices, who represent the human face and neck as smooth and characterless as an egg. The excuse is to impart an air of adolescence to persons of middle age.

It is a very old story; it is, in fact, "the A. B. C. of photography," as John Garo tersely puts it. Many proprietors of studios find it easier to make portraits of this sort than good ones. The same classes of workers speak and write in a slovenly manner and commit other solecisms. "Life is too short," they say, "to get 'edification.' It don't make no difference in the long run." Happily, readers of PHOTO-ERA are not of that class. Even if some of them do not know as much as they should, they are eager to learn and, therefore, will derive much benefit from the words of wisdom expressed by the painstaking artists who have made our symposium possible.

The absence, as contributors, of several prominent portraitists is due to inability to comply—illness or absence from the city. Others—those who have got into the limelight through judicious advertising rather than through actual merit, and whose artistic standing is purely fictitious, have no place in this company of master-workers, and, for that reason, their names were not considered.

"Photo-Era" Pictorialists

IN obedience to the wish expressed by many of our readers, we take pleasure in presenting in this issue the portraits of prize-winners in the Round Robin Guild pictorial contests. The list is not complete; one misses the faces of such well-known contestants as Edward R. Dickson, Paul L. Anderson, J. R. Peterson, W. S. Davis, W. B. Morrison, Karl Struss, Katherine Bingham, Donald Gray and many others. Their absence is due either to a sense of modesty, or to their inability to provide a suitable likeness, a circumstance we sincerely regret. It will also be noticed that some of these portraits do not, in the least, suggest the strong artistic temperament of their owners. On the other hand, no one can mistake the portraits of George Alexander, Theodore Eitel, Ernest M. Astle, H. E. Stout, Walter Zimmerman, D. H. Brookins, William H. Phillips, F. F. Sornberger, Mrs. Willard and a few others, for those of persons of a purely mechanical bent. But a close scrutiny

of all the likenesses— as much as the small reductions will permit—will satisfy the average reader that their owners were justified in following photography as a pursuit.

A Successful Advertising-Ruse

ANYONE disposed to examine the advertisements published in European magazines, notably those in Germany, will discover that, for ingenuity and novelty in advertising-designs, people in those "ancient," but actually very progressive, countries are ahead of us lively Americans. Of this the following incident may serve as an example.

Schwips, a tobacconist, was doing a fair business in the main street of a certain Bavarian town, when, to his horror, a rival—one Knips—opened a shop directly opposite him and, what is more to the purpose, he got the business. He had no better cigars or tobacco, nor were his prices any lower. He simply placed a very pretty girl—a brunette—in his shop-window keeping her busy making cigars. Her beaming eyes and winning smile—seen when she occasionally raised her head—had its effect upon the onlookers. Many of them entered the shop to purchase, generally calling for cigars fashioned by the model's dainty fingers. Schwips was much upset, for his rival had secured the most attractive available girl in the town. One day Schwips disappeared, having left the shop in charge of his apprentice. In a few days he returned, disclosing a scheme which was a ten-strike. He imitated his rival's idea, but, in place of a brunette, he had obtained a lovely young blonde with shapely arms and shoulders, and a fetching mass of shimmering hair. She was gowned in black and sat facing the interior of the shop, *her back to the street*. The effect of this piquant vision was electrical. The allurements of the busy little brunette at Knips's, across the way, had suddenly lost their effectiveness. Her admirers now worshipped at the shrine of her rival; but, in order to satisfy their curiosity, they were obliged to enter Schwips's shop and—purchase. In two days Knips gave up and left for parts unknown.

Moral—Let the photo-supply dealer install a daylight-developing apparatus and an attractive operator in his shop-window, and watch "developments."

A Coronation Portrait

Studio Light for June contains a series of portraits by H. Walter Barnett, several of which are exceptionally good. The female portraits represent very attractive models. The frontispiece is a recent portrait of King George V., with all the glaring highlights of epaulets, embroidery, orders, buttons and other concomitants of an elaborate military uniform. Almost equally white are the face and the ungloved hands. Fortunately, His Imperial Majesty—a man whose character merits universal respect—is here shown in full face, as his profile only too strongly emphasizes the well-known physiological traits of the Georges. We therefore sincerely hope that, whenever possible, the monarch will be represented facing front, as, for instance, on postage-stamps, similar to those issued by Canada and Newfoundland several years ago bearing his portrait, as Prince of Wales.

THE worker who would produce artistic pictures must study art-principles sagaciously.

NOTES AND NEWS

Announcements and Reports of Club and Association Meetings, Exhibitions and Conventions
are solicited for publication



The Projection-Apparatus in the Bijou Theatre

A High-Class Motion-Picture House

A HIGH standard in art, business, politics and morals seems to many people an Utopian idea, and idle dream; yes, even a useless expenditure of energy. While commerce, business and politics of to-day are honeycombed with graft, there are manufacturers, purveyors and professional men who, in pursuit of their different vocations, are guided only by lofty motives—by a desire to be scrupulously honest in their dealings with other men. The accumulation of wealth may be the natural result of their daily activity, but it is not their sole aim. The desire to do good in this world for its own sake, and to take pride in doing so, is inherent in every normal human being, but, unfortunately, conditions are not always propitious for its realization.

The courageous few, even in the face of adverse conditions, remain true to their ideals. The struggle, even for existence, is sometimes a long and bitter one, but perseverance wins out in the main.

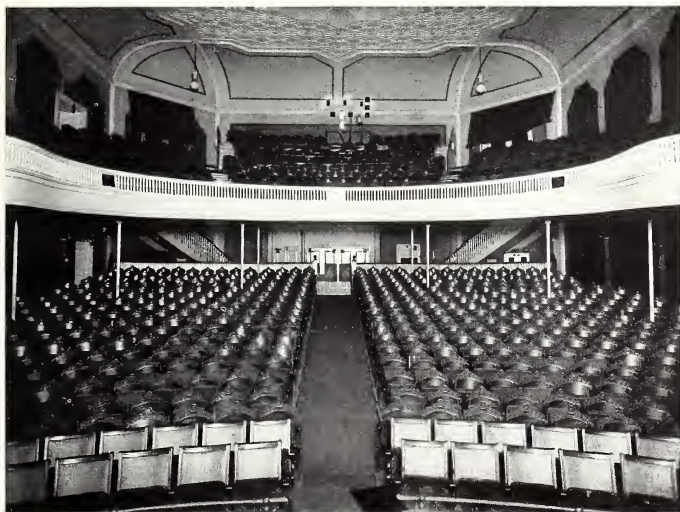
In this category of achievements belongs preeminently B. F. Keith's Bijou Theatre, Boston, Massachusetts, which for several years past has established and maintained a high standard of order, discipline and good taste. Managers of similar houses elsewhere, while cognizant of the lofty standard set by the Bijou Theatre, lack either the ability or the moral courage to adopt it;

but sooner or later the public will demand of all motion-picture houses the same high standard, and those which persist in recognizing only low standards may be obliged to go out of business.

The Bijou programs for the past three years have been produced for the Bijou under the direction of the management of the house, which accounts for the absence of the "Cheap Vaudeville" used so extensively in other picture-houses. One is happy to welcome the "amateurs" when they bring with them the freshness of spirit, enthusiasm and real merit which are so often found at the Bijou. The Bijou Theatre has recently issued an extremely interesting brochure illustrating its method of conducting this popular place of amusement. The secret of its success is revealed by pen and picture, and the story thus presented is eminently interesting, educational and inspiring. Beautiful and original photographic views of the stage, the auditorium, the various offices, rooms, scenes of plays and groups of employees serve to acquaint the uninitiated with the beauty and the resources of this model establishment.

A copy of this attractive brochure will be furnished free on application, or sent postpaid on receipt of three cents in stamps.

As proof of its desire to maintain the excellence of the Bijou's theatrical performances, B. F. Keith's Theatre offers \$100 for the best clean, humorous one-act play;



The Auditorium of the Bijou Theatre

and \$50 for the next best. We earnestly advise our fittingly-gifted readers to participate in this contest.

All communications should be addressed to Josephine Clement, Manager, B. F. Keith's Bijou Theatre, Boston.

An Important Work

ALTHOUGH rich and comprehensive, photographic literature has hitherto lacked a work in the form of a lexicon, treating the entire field of the art-science. This need has now been supplied, thanks to the energetic efforts of Prof. G. H. Emmerich, director of the famous Photographic Institute for Instruction and Research, at Munich, a man eminently fitted to undertake such a difficult task. The work so successfully compiled and edited by Professor Emmerich is entitled, "Lexikon für Photographie und Reproduktionstechnik."

In reviewing the two volumes comprising the publication (see PHOTO-ERA for July, 1910 and May, 1911) we referred to the rare skill, judgment and impartiality shown by the editor in the selection of his material, both text and illustrations. No subject of importance in photography has been omitted by Professor Emmerich. Every department — technical, chemical, optical, historical, industrial — is admirably represented. Although compiled by a German, the work is quite comprehensive and includes the achievements of every worthy person, regardless of nationality. Thus we find biographies of such distinguished Americans as Dr. John William Draper, W. B. Bolton, Carey Lea, William Muybridge, Frederick E. Ives, George Eastman, and Alfred Stieglitz.

The work comprises over 1000 pages, innumerable illustrations and 36 double-page plates on coated paper elucidating the text. It is invaluable to the practitioner, the student, the process-worker, the manufacturer and the dealer, and, although printed in German (in Roman

characters), it appeals to everyone interested in any branch of the art-science. It occupies a high place among the most important contributions to photographic literature and the moderate price brings it within reach of nearly every amateur and professional practitioner. It is published by A. Hartleben, of Vienna, Austria, in two volumes, each at \$1.25 or, complete, in one volume, \$3.25. Postage, \$.75.

B. Y. M. C. Union Camera Club

THE regular monthly meeting of the Union Camera Club was held at their rooms, 48 Boylston Street, Boston, on Tuesday evening, June 6, about twenty members being present. A novel exhibition was held in connection with this meeting. The Club has held several outings this season and each member attending one or more outings exhibited a full set of pictures taken on each outing. Prizes were offered for the best set of pictures and for the best individual picture. Mr. H. E. Bump easily took the honors for the best set of pictures and Mr. F. W. Hill for the best individual picture.

A number of colored lantern slides, by Messrs. Cain and Hill, were also shown up by the new lantern recently purchased by the Club. After the meeting light refreshments were served and a social game of whist enjoyed until a late hour.

Los Angeles Camera Club

THE Los Angeles Camera Club, at its regular meeting held Wednesday, June 7, elected the following officers: R. S. Crandall, President; H. C. McClung, Vice-president; T. K. Adlard, Secretary, and A. H. Lacey, Treasurer. E. R. Allen and Frank Shirley were elected members of the board of trustees. The board now consists of J. B. Ward and the two gentlemen named.

The Eighth American Salon

PARTICULAR attention is called to the fact that the individual worker will have the same consideration here for the jury as the group-worker, with no preference to either. It's the quality that counts. The only difference is that the group-worker tends to produce better work through association with kindred spirits. Perhaps the club itself will receive the greater praise through the reputation of having a membership that can produce salon work.

It will be impossible for the group-worker to crowd out the individual, as the group is recognized *only* after the jury has completed its work. The jury will not pass upon group-work as a group and will know nothing of the groups which have submitted work. Only after the jury has made its selection will the group come into prominence, if they can satisfy the conditions; so it can readily be seen that the individual cannot be crowded. Every consideration will be shown him.

This should be plain to all workers and it should also be an incentive to prove the good in workers banding together for mutual help.

Edward F. Bigelow

THE EDITOR of *The Guide to Nature*, Edward F. Bigelow, notifies us that he is about to lose the use of the property at Sound Beach, Conn., known as Arcadia and for two years the headquarters of his work of nature-study. In this emergency, he needs the practical support of everyone who cares for the movement, not only in the form of subscriptions to his excellent little monthly, but also contributions towards a permanent home. The donor of Arcadia, it seems, withdrew the use of the property because Mr. Bigelow would not take any salary for his work. With Mr. Bigelow it is a "labor of love." The donor, curiously, insisted that he earn a living by it. We hope that most of our readers will subscribe at once to *The Guide to Nature*, which, by the way, contains an interesting photographic department. See advertisement in this issue.

J. P. Haley

J. P. HALEY, of Bridgeport, Conn., vice-president of the N. E. Photographers' Association, is made a leading feature in the June issue of *Portrait*, with a strong portrait and a biographical sketch.

Mr. Haley has worked with intelligence, enthusiasm and success in the interests of the Bridgeport Convention—September 12, 13 and 14. It was through his influence that the Association secured the use of the Bridgeport Armory as a convention- and exhibition-hall. As this spacious building was found to be inadequate, on account of the great demands for space by the photographers and manufacturers, Mr. Haley secured larger and more pleasant accommodations on Steeplechase Island, a change with which the delegates will be delighted.

Mr. Haley is a successful photographer and, if by his conscientious efforts as an official of the P. A. of N. E. he has enhanced his prestige and made a host of friends, no one begrudges him this good fortune.

Ho! For Steeplechase Island

A BRIDGEPORT subscriber has kindly given us a forecast of the good times in store for the New England photographers by sending us a large and complete assortment of picture-postal-cards showing the attractions of the resort. From this evidence we opine that there will be room enough for everybody and plenty of chance for President Garo to carry out his plans on a stupendous scale—September 12 through 14.

A Criticism of Camera Work, No. XXXIV.

THIS is a Rodin number. We began its perusal with a burst of merriment, thinking that the American colored comics were nowhere beside *Camera Work* for real side-splitting fun. But the hook is plethoric in its amusing absurdities, and after the first page nausea began to set in. We scarcely know what Rodin himself must think of this little knot of writers and photographers who offer him such an apotheosis. He must be either for them or against them in his heart. If one had the means of knowing exactly which, one would hold the key to his life, his work and his business in life. Possibly he laughs in his sleeve and accepts the homage for what it is worth to him. We hope so. The illustrations are absolutely unsuitable for a public journal, being reproductions of the slightest possible drawings—feelers after ideas, which most self-respecting artists would not allow out of their own hands. There is, besides, still a deal of adulation of the Post-Impressionist painters, and a deal of frantic posing and reaching for transcendent modes of speech in the articles. The same old denunciation of art-criticism in a journal that is choke full of it—such as it is.—*The British Journal of Photography*.

A Photographer of Men

AMONG the professional practitioners fortunate enough to pass their summer vacation in Europe is Pirie MacDonald, New York's photographer of men *par excellence*. Our brilliant friend sailed on La Touraine, July 6, and is now, doubtless, engrossed in such mysteries as the smile of the Gioconda, the lost arms of the Venus de Milo and the pigments of a Luini canvas. We hope, however, that such tangible, though less classic, experiences as a dinner at Café Marguery, a glass of Münchener Kindl and a *Buehnfestspiel* at Bayreuth, will be included among the offerings to this critical fancy.

\$150 For Short Humorous Plays

MOST of our readers excel not only with the camera, but also with the pen, he it either in a serious or in a humorous vein. In view of the last-named bent, we take pleasure in stating that the B. F. Keith's Bijou Theatre, Boston, Mass., offers \$100 in cash for the best humorous one-act play, and \$50 for the next best. This should stimulate those of our subscribers who are gifted with native humor and a fluent pen to become active at once and devote some of their spare time during the summer to the production of a comedy or of a farce.

PHOTO-ERA guarantees prompt and honorable attention to all contributions sent to this contest, which should be addressed to Josephine Clement, Mgr. Bijou Theatre, Boston, Mass.

A Fine Association Annual

THE Souvenir Program for 1911, issued by the Indiana Association of Photographers for its annual convention, at Winona Lake, Ind., July 10 to 13, compares favorably with those issued by the National body. Of royal octavo size, the volume is tasteful in appearances, well printed and finely illustrated. President Bourgholtzer's greeting forms the preface and contains strong words of wisdom, encouragement and inspiration. Pictures, printed on heavy coated paper, are by members, as well as by artists outside of the state—President Bourgholtzer, Chas. Nichols, O. L. Harrington, George J. Parrott, Ed. Perrey, G. Frank Cady, F. Schantz and E. K. Shalley; also W. G. and A. J. Thuss, Mervyn Sykes, George W. Harris, Will H. Towles and B. Larrimer.

Secretary Shalley deserves to be highly complimented for his share in producing so artistic and noteworthy an annual, which is also a credit to his Association.

WITH THE TRADE

S. W. Nourse



Photo, by Golling, St. Paul

S. W. NOURSE, of Schering and Glatz, is one of the oldest young men in the photographic trade, for he has been with the manufacturers of Schering's pyro, so well known to workers everywhere, for 17 years. Until lately, Mr. Nourse was an inside man, but for the past year he has been traveling through the West, attending conventions and calling on the trade and at the studios, introducing the many excellent chemicals for photographic use sold by his firm. Our ad.-pages give some of these, all of them being of the same high standard of purity as the famous pyro. Mr. Nourse is thoroughly equipped to push the sales of these goods, particularly as his knowledge of photographic processes cover them all from albumen paper to Varitone Tablets. Added to this unusually broad acquaintance is a cheerful, pleasing personality. Mr. Nourse makes a good impression on everyone and succeeds in convincing him that Schering's goods are the best.

The New Seed Booklet

THE recent introduction of two new Seed plates, the Gilt Edge 30 and the Color-Value, made it advisable for the Seed Dry-Plate Division of the Eastman Company to issue a new manual. As it lies before us, it is almost gaudy with its cover-illustration in colors of the brand-labels of the different emulsions. Inside, the text is of the sterling quality so long associated with the directions

and hints on working the Seed plates. We were, however, rather at a loss to know what is meant by the heading of the preface — Negative Making — but finally concluded that "negative-making" was intended. Aside from trifling ambiguities due to the omission of hyphens, the work is most readable, and, as it is full of intensely practical information, it should be perused by every user of these famous plates.

A Delightful Commodity

MANY of our readers doubtless imagine that Burroughs Wellcome & Co. produce only photographic specialties. This is but one of several features of the firm's immense business, its chief industrial activity consisting in the manufacture of medical preparations which enjoy world-wide popularity. Of the latter none is making more friends among both sexes than "Hazeline" Snow, a cream-like preparation for the skin. Persons who indulge in out-door pastimes, including photography, need not fear the painful effects of sunburn, for "Hazeline" Snow gives prompt and delicious relief. Gentlemen appreciate the delightfully cooling and soothing effects of this peerless compound applied after shaving. Another pleasing feature of "Hazeline" Snow is that the cream is immediately absorbed after application.

A small sample jar will be sent gratis to any subscriber of PHOTO-ERA by Burroughs Wellcome & Co., 35, 37 and 39 West Thirty-third Street, New York, N.Y.

A Message from the Antarctic

BAUSCH & LOMB OPTICAL CO. of Rochester, N. Y., has received the following letter from the official photographer of the British Antarctic Expedition under Captain Scott:

"A few days ago while working with my 5 x 7 Reflex Camera from the deck of the *Terra Nova*, I had the misfortune to let the 8 1/2" B. & L. Double Protar, which you made for me, fall overboard, and it now lies on the bottom of McMurdo Sound in 200 fathoms of water. This instrument was the finest and most useful lens in my whole outfit, and has done a great deal of most valuable work in these regions. I want it replaced at the earliest possible opportunity and, as Captain Scott's ship, the *Terra Nova*, is leaving for New Zealand, to return here in January next, I shall be glad if you will have another lens made for me and send it to the New Zealand address which I am giving you on a separate sheet. It will then reach me in time to do a lot more valuable work before the Expedition returns.

"Faithfully yours,

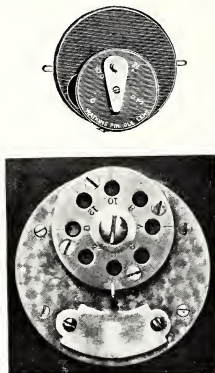
"H. G. PONTING."

William Green

GEORGE MURPHY, Incorporated, one of the oldest and best-known photo-supply dealers in this country, has lately been adding to his office-force young men of tried and conspicuous ability. As we noted in July, George G. Cross, of Boston, Mass., was recently placed in charge of the photo-finishing department.

The latest acquisition is William Green, who is thoroughly conversant with the various departments of the supply-business and well known to the independent photographic trade of New York. He hopes that his friends and business-acquaintances will remember to call on him at his new location, 57 East 9th St., New York, New York.

Some Pinhole "Objectives"



OUR remarks anent the pinhole last month have brought out a number of letters from readers who are interested and who desire to try the pinhole without delay. We give herewith a picture of the more complex form of the Watkins pinhole, imported and sold by Burke and James, Inc., 240-258 East Ontario Street, Chicago. This instrument is designed to fit inside the lens-barrel of the regular camera after removing the cells. It has one large hole for composing the image and four sizes of pinholes. The other picture represents a device made by a subscriber and presented to the editor. Its efficiency is high. We have made some very satisfactory pictures with it, according to the table published in "The Watkins Manual," which is obtainable from Burke and James, Inc. In fact, we cannot do better than recommend our readers, particularly those who are beginning in photography, to invest 50 cents without delay in the Manual, which is in many ways quite the best handbook in the photographic field.

The Ingento Background-Carrier

THE newest device on the market to help the home-portrait amateur will be found advertised this month. An interesting circular giving an exhaustive description

of the Carrier will be sent to our readers on application to Burke & James, 240-258 E. Ontario St., Chicago, Ill.

New Manager for Photo-Crafts Shops

OWING to a change in the Photo-Crafts Shops of Racine and Kenosha, Wis., O. R. Thompson, formerly of Chicago, has been placed in charge. He will maintain the high quality of work sent out from the establishment. Mr. Thompson has been identified with the photo-supply business in Chicago for many years and is well fitted, in every way, to give patrons absolute satisfaction, as all his efforts are guaranteed by his firm.

The Twelfth Defender Office

A BRANCH office has recently been opened by the Defender Photo-Supply Company in Los Angeles, at 200-209 Broadway Central Building, South Broadway. It will carry a complete line of Defender papers, dry-plates and chemicals. Martin L. Wolver is manager. He comes to the Defender Company from Chicago, and has been connected with well-known firms.

The Junior Reflex

THE REFLECTING CAMERA has many advantages, particularly for the beginner. The Reflex Camera Company has brought out, under the name of the Junior Reflex, an excellent little instrument for $3\frac{1}{4} \times 4\frac{1}{4}$ plates and film-packs. It has the essential feature of a ground-glass on the top of the camera so that the mirror throws on this screen, the full size of the plate, an exact image of the view as it will appear in the print. But the most noteworthy feature of this camera is the patented device which automatically changes the stops in the lens. For focusing, the largest stop is in place, hence the image on the ground-glass is brilliantly lighted; but when the shutter-release is pressed, the stop is withdrawn and a smaller one, giving better detail, is substituted just before the shutter snaps. The list-price of this instrument is only \$12. The Reflex Camera Company, whose ad. appears in this issue, will gladly furnish the name of the nearest dealer to inquirers mentioning PHOTO-ERA.

The Wellington Anti-Screen Plate

SUMMER is the season when the amateur longs for a plate which will retain the cloud-skies while sufficient time is given for the foreground. If a ray-filter is used, it is often essential to have a windless moment for the exposure. The Anti-Screen plate retains the clouds and requires no increase of exposure, as the filter-dye is in the emulsion, which is extremely fast.

PHOTOGRAPHIC EXHIBITIONS

Information for publication under this heading is solicited

<i>Society or Title</i>	<i>Date</i>	<i>Entries Close</i>	<i>Particulars of</i>
International Exhibit for Artistic Photography Hamburg	Oct. 1-15, 1911		Gesellschaft zur Foerderung der Amateur Photographie Hamburg
International Industrial Exposition Turin, Italy	Until Oct., 1911		Prof. Emmerich, Dept. Photography and Reproduction 2 Martin Greif Str. Munich, Germany
London Salon of Photography	Sept. 9 to Oct. 21, 1911	British, Sept. 1 Foreign, Aug. 21	PHOTO-ERA

PHOTO-ERA

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No. 3

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WILFRED A. FRENCH, Ph.D., Editor

Associate Editors, MALCOLM DEAN MILLER, A.B., M.D., ELIZABETH FLINT WADE

Contributions relating to photography in any and all of its branches are solicited and will receive our most careful consideration. While not accepting responsibility for unrequested manuscripts, we will endeavor to return them if not available, provided return-postage is enclosed.

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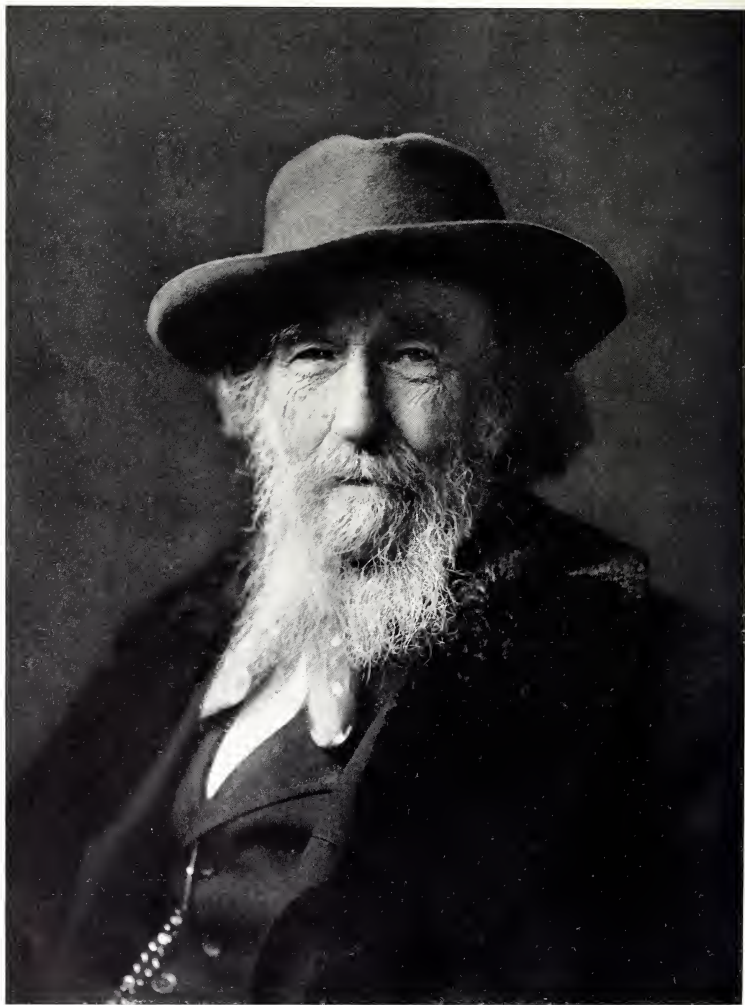
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WALTER M. BRACKETT
A. MARSHALL



PHOTO-ERA

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The Camera Down in Panama

FELIX J. KOCH

THE approaching completion of the great Panama Canal, coupled with the rumors of revolt in the baby republic for the purpose of securing annexation to the United States, lends particular interest to what photographic possibilities may be like in what may prove Uncle Sam's next possession.

Newcomers at *The Tivoli*, the government's great hotel at Panama City, invariably, on arrival, before descending to luncheon, have themselves photographed on the great veranda, just outside of their rooms.

On that first afternoon in the capital, too, wandering among its quaint corners, one devotes a large part of the time to picture-taking. Again and again one repairs to the hotel, in order to put away film and get out fresh supplies. Then, on paying a visit to Colonel Goethals, in supreme charge of the Canal, up on the steps of the head-quarters at Culebra, a picture is taken of himself. When one stops in the heart of the jungle, the dense vegetation affords interesting camera-catches. Gatun Dam, too, with its monoliths of concrete, holds you and your lens. Everyone, of course, must have a picture taken of himself, armed with pick and shovel, helping to dig "the ditch."

The lottery-peddlers, selling tickets at a dollar apiece for the Sunday drawing, are irresistible studies for the "kodak-fiend." Such, likewise, are the little nude Spanish babes, in the court-yards, though their mothers are rather likely to insist on putting a slip over them before allowing the picture to be taken.

Turning from catching some attractive boy, one will see an old Jamaican negress also fleeing from the kodak. The simplest hovels in the town have the family pictures on the walls, these, now and then, crossed with crêpe as token of mourning. On the market-square at Panama City, a man takes a photograph and finishes it in a minute's time. Panama City has its motion picture show, of course operated in Spanish.

When editorial delegations visit the Isthmus,

the photographer in the party reaps a rich harvest. Many tourists, however, carry their own cameras, and films down here are sold, already done up in tin cans.

Uncle Sam has an official photographer and from him one can secure pictures, printed to order, at twenty cents apiece. Other photographs range from fifty cents upward. At Colon, too, there is a photographer, but he has no prints to show. One prefers, therefore, to buy from amateurs on his ship at a dime apiece.

Onto the banana plantations, on the Costa Rica line, one finds attractive subject-matter for pictures. All Panama, however, is a picture-land, and the enthusiast never can tire. Just for example, some day you take a drive countryward, to Corozal. On each side of the road the tall coconut-trees rise, erect and perfect, of pyramidal form as if trimmed by the world's greatest landscape-gardener. They make you think of the palm-trees 'round the grave of the ill-fated Josephine; but, with their heavy load of fruit, you find them very beautiful. You level the camera, and — how the lights and shadows do stand out beneath the tropical sun as you take a snap-shot of the road-way! At the roadside, Manuello is watching you — *machête* in hand. If you are thirsty, Manuello, for a few pennies, will climb one of those palms and bring down a bunch of the cocoanuts. With the knife he cuts square across the top of one, through the green rind, the white husk, the brown shell-to-be, and then over, and, by a skill born of long practice, he leaves a hole about the size of a quarter, at the center of the nut. You put your lips to this, turn the nut upside down, and drink deep and full of the luke-warm, almost tasteless milk. It is so cooling, has such a pleasant aftertaste, though, that you cannot resist drinking more and more. Then, with his *machête* Manuello splits open the nut, and carves out pieces of the meat for you to nibble, as you go on.

What a wonderful chance for portrait-work these roadside people offer! Take just the



FELIX J. KOCH

SNAPSHOTS FROM PANAMA

negroes. There is the Barbadian — so distinct from the soft-voiced Jamaican. The latter are more numerous; the former the less refined. Then there is the French-speaking Martiniquan, long humbled by contact with the Latins, and the arrogant negro from the States. All these are workers on the great Canal and are here by the hundreds. The Spanish types and the old native whites of Mexican descent, the American *conquistadors* — soldiers of fortune — and the Chinamen, who are the shop-keepers, all these are here in Panama.

Go out to Old Panama, and there are other studies. Away back when American civilization was young, Old Panama, you know, was the richest city of the continent. Then, one memorable day, Morgan, the buccaneer, dropped anchor near by, and his men came through the jungle, and then — well, only ruined towers and jungle-grown battlements remain to tell the story. You work your way among palms as high as your head, and through rank tropic foliage, just to get far enough off to get all of the old tower into the field of your camera. Down in the bottom you take a "time" of a simple peasant grave, marked by just a wooden cross. The light filters through some trees which took root at the tower-top and now grow there proudly, and falls in long, irregular shafts on the grave.

Out beyond the jungle, the Pacific laps upon the sands. Where the jungle comes to its edge, the curious flora attracts. Sometimes, too, you halt for a study in animal-life, one of those huge balls, like the little globes you find in autumn on the stem of the golden-rod, but exaggerated a thousand times. These are the ant's-nests, built by a million of the great red ants, high up in the tree. Look carefully along the ground and you may meet an ant-army. Five, ten abreast they march, the line or column as evenly drawn as if one piece of ribbon. Each insect bears a bit of leaf or flower, much larger than itself, and all for the building of the home. It is indeed a wonder-land, this Panama.

Even the architecture has its fascination. Two-storey structures, in the Spanish style — shops set on the lower floors, domiciles on the upper. To the balconies the women come, of evenings, to sew, or chat, or listen to some passing street-musicians. It's an idle happy life — this of the tropics; you know, *Manaña* — To-morrow — will do as well as to-day. If little Gaspar's face be dirty, well, mother can wash it to-morrow. If the stockings are torn, one can mend them to-morrow. If the meal is not yet cooked, it is not yet supper-time. It is so much pleasanter to dawdle and idle than to work in

the tropics. But that is Panama, the Republic. Just over the imaginary line you are in the Canal Zone, and at once you note the difference. You who want studies in labor-types — who are after pictures of the man with the pick, or the hammer, or the huge iron truss, need only come to this part of the Isthmus. Somehow, though, it isn't picture-land. Instinctively the camera-fiend sneaks away from Gatun, with its giant dam, and from the towering walls of Culebra Cut, to the jungle. There he waylays the solitary Panamayan, riding a horse to the next town, and catches him, by a snap-shot, ere he knows it. You might label the picture *The Awakening* if you would, for only now is Central America awakening to worry. For two hundred years, more or less, the Canal has held forth the promise of a job when one "went broke." First one, then another, then still another company was working at The Ditch, or if not, they needed caretakers and watchmen for their work; or the watchmen wanted substitutes while they took a vacation. So you could always get a good job — for Central America — down there. Now, though, things are changing! 1914, Colonel Goethals says, will witness the completion of the Canal, though the official time set is 1915. Then, when the waters go flowing from sea to sea, and the mighty liners lie docked at the entries awaiting their passage through the locks — the Panamayan will be out of work, and while it is pleasant indeed to sit on the long sloping hillsides, overlooking the mighty artificial river, still, one has to live, even on the Isthmus, and there are things which even that fertile soil doesn't produce.

All of which reminds one that one mustn't quit the Isthmus without a camera-snatch at one of the native huts. You may have to go far from the heart of things to find one, but they *do* exist, even in The Zone. Of thatch, sloping from a central apex to each side, like a sort of inverted cone, the roofs come to within a few inches of the ground. There the space is open, perhaps more to admit the cool of evening than to give free circulation of air. Within, things are as in the *kraal* of the African, and you couldn't take a flash-light, for fear of fire, if you wished to. Luckily for Panama, but unfortunately for the picture-lover, those olden-day homes are disappearing slowly and wooden shanties replacing them.

But there is another side to rambling in Panama, likewise productive of pictures. Everyone who goes to Panama, of course, buys a Panama hat, just as everyone visiting Cologne buys the well-known perfume, and on the main business-thoroughfare of the capital quaint little arched



doorways are hung with the hats. Inside are a few show-cases of the other specimens; at the rear some hats are being woven. Only—breathe it not in Gath—most of the Panama hats are made in Nicaragua, and by Indian labor at that. Hats and bands are sold separately down here, and you step across the way to the Chinaman's shop, and make selection of ribbon. If you are American—a stranger, that is—they charge you forty cents for such a one; if a canal-digger or worker, it's only twenty-five. How do they know the difference? Well—how do you or I know the stranger on our city streets from our own townsmen?

Those stores of the Chinese are pictures, likewise. Each one has well-nigh everything heart might desire, west of Suez, and each is laid out identically the same as its fellows. On the left, as you enter, are liquors—bottle on bottle—with a little bar at the counter; on the right, knick-knacks and small notions. At the rear, bolts of dry-goods and boxes of hardware. One wonders what there is not on those shelves. And John suavely listens to your chatter, lets you pity him, "guy" him—but, in reality, John is "doing" you and you'll know it only when you come to ask the Canal-folk what your purchase should have cost.

There is all the lure of a Castilian city in parts of Colon and Panama City and Bocas, when you get away from the traveled road and back in the courts. You who have seen the wonderfully beautiful production of "*The Rose of the Rancho*" will recollect how the audiences went mad with delight as the curtain revealed the sunny plaza with its overhanging balconies

and its beautiful brown-skinned maidens. But, pass through the dirty arcade of a Panama home, here, anytime, and you'll see just about all that—only much more vivid.

And so one could go on well-nigh eternally, hunting pictures. It has a lure about it that grows, like a passion. Tired though your legs may be, you *must* rise and follow in the wake of a dusky troubadour who saunters along, playing his mandolin. Ere long he will halt before some small shop, and out on the balcony a lady-love of Ethiopia appears. And then he plays, old Latin melodies, handed down by his ancestors, who heard the Spaniard or the Frenchman play them on their spinnets in the great houses they built, as they worked on the Canal. Out on the environs you get other bits of life, in pictures. There, of a Sunday, is held the cock-fight, and you may "snap" two husky Spaniards matching their respective birds or discussing the fine points of each. Is there no end of subjects here, you wonder? You'd like to stay and take pictures—and more pictures—and still more; but then—there's an end to your supply of film, and developing and printing costs money. What is more, it's sailing-day now; few travel or stay more than five days on the Isthmus, and you *must* get a negative or two of those gorgeous Caribbean sunsets!

✕

GIVE the best there is in you, always—even to your humblest subject. They come to you because they believe in you and your powers. You cannot afford to destroy that faith.

Blanche Reineke.



THE ENCHANTED MESA

FREDERICK L. MONSON

Those Masterpieces

QUERIDITA

E. L. C. MORSE

Of all the party, evidently Francisca was the best, from a photographic point of view at least, and it was merely a question of how and where I could take her picture. She was the landlord's daughter, eleven years old, and a typical beauty. She rode her horse like a professional — or, rather, better than any professional I had ever known. But there were technical difficulties in the way.

Her hair was intensely black, she wore a flaming red bodice and a white skirt — and no hat. The pony was a buckskin, and the saddle dark reddish. Clearly all this called for an ortho. plate and a filter. Consulting Watkins, I found I could safely take the picture with a four-times filter in 1/50 second with my F/6 lens. My memorandum told me that at, say, 30 feet I should have a depth of field of 20–30–62 feet. Just the thing! Take Francisca on the pony and have that glorious valley for a background, and yet not distinct enough to divert attention from the main point of interest which, of course, would be the young girl on the horse. Visions of a salon picture rose in my mind. The opportunity of a lifetime should not be missed. I laid my plans accordingly.

However, photography was merely a side-issue in that trip. We had come to Etzatlán to view a mine which was situated somewhere away up in the mountains. The trip up the cañon was easy; there was an ox-cart road to the foot of the mountain; but when we left the road and started up the side of the mountain, it was decidedly different. I had selected a mule for the trip because mules are sure-footed in the mountains, if one is wise enough to let them go just where and when they please. I had been cautioned in advance on that point — let the mule have its way, and let it go just where it pleases. Never have an argument with a mule on a mountain-trail — wait till you get back on low ground. So Queridita had her way. On comparatively level ground Queridita had a nice, smooth little fox-trot which was not bad for a man accustomed to ride tough broncos for the fun of it, at home, on the farm, away back in Illinois. Queridita was an old hand, so to speak, in the mountains and nothing in a day's work would scare her, the landlord assured me. You could fire a rifle off her back and she would not even shy. You could roll a cigarette, eat luncheon,

read a book, go to sleep or do anything reasonable on her back and she never paid the slightest attention to the rider. Of course if you looked carefully, you might see that she was taking it all in through one corner of that placid eye of hers, but you needn't mind that. The furry, brown Sienna, pointed ear stood erect and she went on as unconcerned as ever, provided —.

On striking the mountain-trail, I contrived to get ahead of the girl I was to photograph. Her father was the guide and I followed him. Behind me came the mozo (servant) and the rest of the party. The mozo had his orders to keep his eye on me in case anything should go wrong.

The scenery was magnificent beyond comparison, but I concentrated my attention on the mule and she bent her trained intellect on the task before her, which was to take herself and the one hundred and eighty pounds of avoidrpois on her back up a trail which was a very bad joke. At places you could barely squeeze along the side of the cliff, one stirrup grazing the rock and the other hanging over eternity. Occasionally the mule would loosen a stone, and after a long interval you would hear it strike the bottom of the cañon below. And when you made a sharp turn on the narrow path for the next zigzag, and those four little hoofs stood quite close together and the mule swung slowly around, at that juncture you caught yourself holding your breath and asking yourself why under high Heaven you had ever got yourself into such a position. Well, "the missis and the kid" would come in for the life-insurance — that was one consolation. Still, all in all, one prefers to die in bed like a decent Christian.

However, Queridita fetched me through, and my respect for her rose mightily. I began to understand why they called her Queridita, which is the Spanish for sweetheart. But she had one peculiarity which I did not like. Most sweethearts have penuliarities. When the trail widened, Queridita, instead of taking the middle of the road, perversely preferred to walk on the extreme edge of the precipice — possibly so I might enjoy the scenery the better and get an uninterrupted view of where I should land in case she should accidentally misplace one of those tiny hoofs. I looked around to the mozo with an inquiring expression.



LATE AFTERNOON

F. E. BRONSON

"*Esté bueno, señor: no la moleste*" (It's all right, sir: don't bother her), said he, wagging slowly the forefinger of his right hand—a movement without which no native of Jalisco can express a negative.

It dawned on me that probably the mule and the mozo, brought up in the mountains, knew better than I did, and a mule is only a mule, and what is the use of arguing with a mule on a mountain-trail? So Queridita had her own sweet way for the time being.

By this time I had recovered my mental equilibrium and my mind reverted to photography. I began to think of the landlord's little daughter. For her the whole trip was a lark and in her mind just about as dangerous as it would be for a city child to ride two blocks in a street-car. She and the buckskin were certainly a beautiful picture and worthy of the best lens that ever came out of Germany. As for the pony, he was in his element; he and the child seemed to understand each other perfectly. The child's eyes were sparkling with joy; she was perfectly happy—and unconscious. My enthusiasm as an amateur photographer rose to the highest pitch. But the lights, the distances and the background? Here was no studio problem; it was the real thing. She and the pony should be taken in the open with the valley for a background, and possibly a rock at a suitable distance, or a dwarf cedar—nothing else. No other person should be in the

picture. Buckskin pony, dark reddish saddle, girl with a white skirt, bare feet, astride, no hat, black hair in a long braid tied with a blue ribbon, bright red bodice, olive complexion suffused with the glow of healthy blood. Foreground, reddish-yellow bare rock. Distance, the white adobe village of Etzatlán nestling in the verdure, and in the extreme distance, Lake Magdalena shimmering in the sunshine and reflecting the shade of overhanging purple mountains. A riot of tropical color! What a lantern-slide it would make!

The trail up the mountain was a zigzag, and the party was spread out. Don Antonio was ahead and I needn't bother about his being in the picture. After me came the mozo and Francisca, my photographic victim; the rest were far behind, out of the photographic field. The girl must be taken with a half side-view; she must be unconscious and absolutely natural; the sun must not be full in front of her, nor yet quite behind her. To leave the trail or to stop the cavalcade was out of the question and would spoil the picture. Clearly the only thing to do was to wait until the various factors of the problem momentarily arranged themselves in a proper pictorial position.

It came at last. I had just turned the bend and was well up my way on the next zigzag. The mozo was at the bend. Francisca was approaching the bend. She was singing to herself and looking forward unconsciously. Back-



CAUGHT OFF THIRD

Copyright, 1910, T. M. Richardson
T. M. RICHARDSON

ground perfect. One minute more and everything would change. Now is the time!

I reached around stealthily and drew out my camera from the saddle-bag. The shutter was set at 1/50, the filter and the direct-vision finder adjusted with the celerity which comes with practice. I had just half a minute to spare as I looked around. Don Antonio plodding up the hill ahead of me. The mozo below at the bend. And Francisca? I couldn't have posed her better myself. The rest of the party out of the field of vision. Lake Magdalena and the purple mountains — absolutely perfect.

I grasped the lens-board, pulled out the bellows and turned in a flash towards Francisca.

At that moment, I shot up into the air. The camera fell from my hands, rolled along the steep hill and disappeared over the brink.

There are bucks and bucks, and, considered from an artistic point of view, Queridita's buck was distinctly not up to the standard. Any frisky Texas pony could have done better — any of the common kind that you buy over at the Stock Yards for \$25.00, with a rope about his neck and without warranty. In fact, Queridita's buck was merely up to the level of any ordinary Illinois farm colt, say, a cross between a Morgan horse and a Percheron. But the point is that in this case it was effective and

added one more to the list that every amateur has of those glorious masterpieces of art which were never taken.

* * *

"You see," said the landlord as we sat smoking in front of the hotel after supper that night, "Queridita is one of the best mules in these mountains. But never before had she, a decent, respectable Mexican mule, had the experience of having a gringo on her back who turned suddenly and pulled out something new and strange from a small box. It was the — the — fuelle — how you call him in English?"

"Bellows," I suggested.

"Yes, the bellows," said he. "It was the sudden expansion of the bellows that molested the mule. And, after all, señor, a mule is only a mule."

Don Antonio drew a long pull at his cigarette, shrugged his shoulders, lifted his palms upwards, looked at me solemnly as the smoke slowly issued from his nostrils and repeated:

"A mule is only a mule, señor."

Don Antonio paused for a reply.

The proposition struck me as self-evident, so as I fingered the battered remains of my camera I could only re-echo:

"Quite so — a mule is only a mule."

AUTUMN MIST



H. M. LONG

Home-Portraiture That Is Different

FELIX RAYMER

THE title of this short article was suggested to me by the editor, who asked me to write him an article on home-portraiture, "but make it different from anything you ever did before," or words to that effect: so I decided to make it different, and to that end I show a picture of a young woman that was made on a 16 x 20 plate. The only illumination for making this negative was a small window about such as is often seen in hallways, or on stairway-landings. In fact, this window measures just 18 x 24 inches, and — where the "different" part comes in — no effort was made to control the light by the use of screens or curtains. The glass was "plain" glass, which, of course, admits of a stronger illumination than ground-glass. The subject was seated on a raised chair so that the light passed over her face from an angle of about 45 degrees, and her face was turned towards the window until the light came around on the shadow side of the face, to the outer corner of the eye. The window being small, concentrated the light on the face, and in addition to this, being up rather higher than common, it left the draperies in a much lower tone. The hair had a dash of powder in the shadows to preserve or rather to emphasize the detail. I use for this purpose a powder-puff — and after shaking off the excess of loose powder pass the puff with a light motion over the darker portions of the hair, following the direction the hair is dressed, so as not to disarrange it. It is just as important that the operator know where the powder should be placed as it is for him to know where to place his light and shade in making his lighting. The detail should be obtained where it is needed and so that it will balance the light. The low tones in the draperies were produced by lighting only, and, while there may be some cause for criticism — due to certain parts being a trifle too intrusive — taken as a whole, the drapery shows good quality. Much has been said of screening the light, and, as a rule, the demonstrators at the conventions show a wonderful array of screens, cloths, and other articles for controlling the light: but after working by almost all sorts of lights, I find for my personal use that the matter resolves itself into only two things. They are, first: Be sure the *COLOR* of the flesh can be seen through the highest light on the face; second: Be equally sure the *color* of the flesh can be seen through the deepest shadow. Now take literally the

suggestion of *all* plate-manufacturers, to "time for the *deepest* shadow and develop for the *highest* light," and do it, and we will have a perfectly-balanced negative. This makes it possible for one to use *any* light, provided one *times* for his deepest shadows. My reason for insisting on seeing the color of the flesh in the highest light and the deepest shadow is that we are photographing *flesh*, and if it can be seen in these two extreme ends of the scale, we certainly will get *flesh* from one extreme end to the other, when properly developed. I have no doubt that my ideas on developing may be somewhat different from those of others; but I have never found a better plan than to judge the negative from the back of the plate, and when the highest light just appears on the back of the plate, I pronounce it finished. This gives what many, at first sight, call a thin negative, and so it is; but again I am "old-fogey" enough to believe that better *printing-quality* can be had in a negative which shows some color, such as a warm olive or amber, than from a blue-black negative, and to get such a negative I control the color with the sulphite of soda. A few trials will show one the *color* best adapted to good prints, and, if after a trial the print looks weak, do not develop the plate farther, but reduce the sulphite, and get more color. The negative from which my illustration was made is so thin that the finest newspaper-print can be read through the highest light, but it has *color* enough to "hold up under the light." It has been my experience and observation that more home-portraiture negatives have been ruined through over-development than from any other cause, as over-development causes one of the most serious faults to be found in homework, and that is *harshness*. Every effort of the operator has to be expended to overcome harshness, and if he over-develops the plate he undoes everything he has done in that direction.

There is no end to the many different effects of lighting to be made by the home-window, and, as a rule, all are pleasing if properly timed and developed. The main consideration in making any effect of light by a small window is to get the whole source of light in *front* of the subject. This is necessary for securing *roundness*. When one has a very large light, the volume of light is great enough to distribute itself evenly all over the subject; but when it is very small, it must be distributed evenly all over *that part of*



A HOME-PORTRAIT
FELIX RAYMER



PORTRAIT OF
WILLIAM NORRIE



the subject that will be seen by the lens; the part that is not seen by the lens being of no importance to the picture. The rule that "the more front light used, the greater softness obtained," should be remembered when one is working by a small window. Another rule which, I am sure, will help secure better results is to have the strongest part of the light a trifle above the center of the subject's face. And again I am going to say, give ample exposure, so as to go way down into the deep, dark shadows, and then stop developing when the highlights are done. When the highlights are done, if the shadows are not done, it is because sufficient exposure was not given. Don't try to get detail in the shadows by development; it simply can't be done.

AN ECONOMIC MISTAKE

ONE of the things that I notice in nearly every studio that I visit is the fact that so many of the proprietors are so busy doing the little things around the place that they have no time to think of the business in the aggregate. Take the man who owns a studio, who is worth from \$25.00 per week up, and we find him putting in time at things that a \$5.00 a week girl can and should do, and this is the cause of so many studio-owners finding their business running them and not the business being run by the owners. There is not a business on earth that a man can be successful in if he hires a \$100.00 man for a \$20.00 job, and why should a photographer do it? — G. W. Harris.

Enlarged Negatives by Reversal

CHARLES JUNG

IT would seem that hitherto enlarged negatives made direct by reversal have not met with favor at the hands of photographic workers, despite the advantages of the process. This appears to be the result of the want of exactness in the directions for working the process. After numerous experiments, I have arrived at the following method, which, applied to some hundreds of cases, has invariably given me magnificent negatives, clear and brilliant, and reproducing the faintest details of the original negative. The enlarged negatives have proved excellent for printing on pigment-papers or for the oil-process. The following are the stages in the process, and any worker who will pay due regard to the various precautions is assured of success.

The bromide negative-papers specially sold for the purpose will, of course, answer well with the process, but I prefer to use ordinary bromide papers sold for positive-printing. The cost is much less, and they may be obtained from any dealer. Such a paper should respond to two conditions: it should be on a thin support, and it should allow of a certain latitude in exposure. For the greater part of my work I have used the Velvet bromide paper of the Kodak Company. Its speed is about one-quarter that of the blue label Lumière plate.

It is most important to avoid all contact with the surface of the paper either with the fingers or with brushes. The least pressure on the paper leads to stains, which will deface the final negative. All the operations, from the moment the paper has been placed in the first bath up to the removal from the fixing, should be done in the one dish, and without touching the paper.

The paper is exposed in the same way as for an ordinary enlargement, except that the time should be considerably longer. It is well to expose about three times the period which would be given for an ordinary enlargement: even a longer time may be given—say, seven or eight times the normal—and perfect negatives obtained. In all cases it is better to give too much rather than too little exposure.

The paper, having been laid in the dish (from which it should not be removed until finally fixed), is covered with water for about a minute, and a developer then applied. The developer is:

Amidol	1 gm.
Soda sulphite anhyd.	2 1/2 gms.
Water	1,000 ccs.

For use, thirty ccs. of this solution are mixed with thirty ccs. of water. This quantity is for a sheet of paper 9 1/2 x 7 inches. If there are several prints to treat in succession, the same bath can be used, it being replenished, as required, by further addition of the stock-solution given in the formula above.

The image appears very rapidly. Reckoning from the moment when the subject of the picture is fully visible on the paper, development is continued for a further five minutes, rocking the dish without interruption. This average time (five minutes) for development has given the best results. Adopting it, there is no need to observe the density of the image by transmitted light.

After development the print is rinsed three times in succession, laid on the bottom of the dish to drain, and then brought out into full, strong daylight.

The time during which it should be exposed is an important point, and requires a certain amount of practice. If too short, the negative will be harsh; if too long, it will be flat and lacking in contrast. The normal time to be given in order to obtain an enlarged negative with gradation corresponding to that of the small original is reached when the highlights of the image have acquired a quite distinct rose tint. If these highlights assume a violet tint, it is a sign that too long an exposure has been given.

If there are no highlight portions in the subject, a very simple photometer may be used as a guide to the exposure: Arrange on the edge of the dish, before exposure to daylight, a small strip of the bromide paper which has been used. As soon as this latter has attained the rose tint the exposure will be complete. In December, at noon, with an over-clouded sky, the average time will be forty-five to sixty seconds.

The paper is now flowed over with the solution for dissolving away the reduced (developed) silver. Various formulae may be employed for this purpose, compounded from permanganate or bichromate of potassium. As a two per cent solution of potassium bichromate is used as a sensitizer for the oil-process, I have used it conveniently for reversal, adding to it nitric acid. The following is the formula:

Potass. bichromate	2 gms.
Nitric acid	2 gms.
Water	100 ccs.



Under the action of this solvent bath, the image disappears very rapidly: the action is complete when all the shadows have disappeared, leaving behind a faint orange outline of the original image.

The print is then rinsed twice and placed in a dish containing:

Soda bisulphite liquor	10 gms.
Water	100 ccs.

The yellowish tint of the print immediately disappears in this bath, and only the heavy shadows of the subject are most faintly visible. The solution may be used for a fairly large number of prints, despite the greenish tint which it soon acquires.

The print is washed for about five minutes, rocking the dish and replacing the water by fresh each minute. These washings are very important, and should be done with care; otherwise parts of the gelatine will be left containing bisulphite or acid bichromate, which latter acts on

the amidol, when the latter is used as a re-developer, producing stains. The washings should be done in red light, in order to avoid the action of daylight on bromide of silver which has not been completely reduced.

The developer used is the same liquid which serves for the first development. The time during which it requires to be applied to the print will range from between five to fifteen minutes, according to the time of the exposure to daylight. Development may be considered complete when the image seen by reflected light as it lies on the bottom of the dish, held ten cm. from the darkroom lamp, appears almost uniformly black.

After development the paper is rinsed twice with water, and then transferred to the fixing-bath of twenty per cent hypo. Immersion here for a few seconds is sufficient to dissolve the small quantities of unreduced silver bromide left in the paper. The print is finally washed and dried in the usual way. The paper may be rendered more translucent by rubbing it on the back with almond-oil.—*The British Journal*.



THE YOUNG PIRATE
WILLIAM A. BOGER



Fixed-Focus Enlargers

LEIGHTON P. COLEMAN

WITH the increasing demand for the vest-pocket type of camera with its short-focus lens, comes a corresponding demand for a suitable enlarger. Several of the manufacturers make enlargers for use with their small cameras: in some cases the enlarging-camera is complete in itself; whereas, on the other hand, the small camera with its lens used to make the original picture is used in conjunction with other apparatus. The first type is exemplified by the Brownie Enlarging Cameras, and in the latter class will be recognized the Goerz product, which makes enlargements 5×7 inches from negatives $1\frac{3}{4} \times 2\frac{3}{8}$.

The reader is doubtless familiar with the several varieties of enlargers which are advertised in the columns of this magazine, and it is not my purpose to take up this subject now, but instead to show by plan and word how to make a fixed-focus enlarger for use in daylight without making a darkroom essential, unless the operator uses bromide paper.

For years I have lugged a 5×7 outfit with suitable tripod and eight double plateholders, weight fifteen pounds, with Goerz $8\frac{1}{4}$ -inch Dagor and all, but at last the worm has turned and I switched from that to a 3A size making the well-known post-card pictures. This outfit, complete with tripod, weighs only five pounds, with the added advantage of a focal-plane shutter if wanted.

Of course I was beset with a desire for an enlarger: no darkroom available except at night and no condenser for use with artificial light: hence a daylight enlarger, for use with gaslight-papers, giving a two-times enlargement—say, 8×10 inches or thereabouts—from my negatives or exactly 8×10 from 4×5 plates, and by the use of my $6\frac{1}{2}$ -inch focus anastigmat from the small camera.

The method of procedure is as follows: First find the focal-length of your lens and then apply the rule for linear enlarging as shown on the diagram, Fig. 1. In order to enlarge four times, multiply the focal-length of lens by five, which will give the distance from paper to lens. By multiplying the focal-length by $1\frac{1}{4}$ we find the distance from lens to negative. When the distance between paper or negative and lens is mentioned it should be understood that measurement must be calculated from the diaphragm (or a fraction of an inch back of it in the case of some doublets). As a rule, the maker can

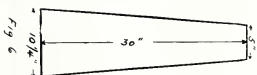
say at just what point the equivalent focus rests.

Assuming that a two-times enlarger is wanted for use with a $6\frac{1}{2}$ -inch focus lens, we can order from the carpenter white wood dressed on both sides and edges to one-half inch in thickness, free from knots and irregularities, two pieces each 30 inches long, $9\frac{1}{4}$ inches wide at the large end, and 4 inches wide at the small end; and two more each 30 inches long, $10\frac{1}{4}$ inches wide at one end, and 5 inches wide at the other; also one piece 5 inches by $7\frac{1}{8}$ inches for the lens-board.

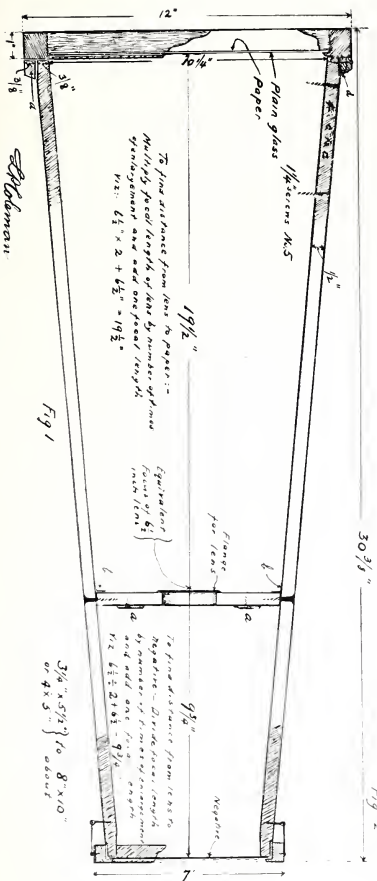
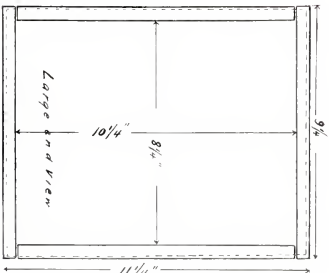
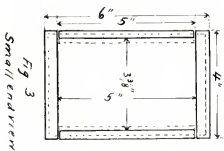
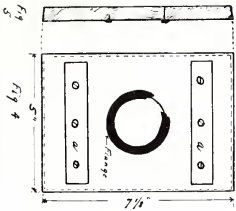
Procure from a photographic supply-shop a regular 8×10 printing-frame with a plain and a ground glass—the latter for focusing—also a Kodak 3A printing-frame with plain glass only; from the hardware-store four dozen flat-headed iron screws $1\frac{1}{4}$ -inch No. 5, two dozen wire nails with flat heads $3/4$ inches long and of small wire, a small can of LePage's glue, also a can of Dead Black Japalac and a brush for its application.

Indicate the permanent screw-holes with pencil-marks and set up the four large pieces with a few screws—temporarily; drill holes for screws to avoid splitting the wood. Bore out a hole in the center of the lens-board to receive the flange. Bevel the edge as in Fig. 5 and put the board into place at the proper distance from the negative. See Fig. 1. Now bevel the edges of the small end to accommodate the small printing-frame; put a negative into frame and hook it into place with small brass hooks and suitable eyes. Set the camera on a table with the small end toward the north light, throw a focusing-cloth over the large end and hold the ground-glass in 8×10 frame against the end. If it focuses properly, take the camera apart and give it a coat of dead black inside, and when putting it together permanently apply glue to the edges in contact and then set up the screws tightly. The strips "a a," of some different kind or grain of wood, should be applied to keep the lens-board from warping. It is likely that some fraction of an inch will have to be sawed off the large end before putting the 8×10 printing-frame in place. I ordered 30-inch stuff, for it is easier to cut off a half-inch or so than to add a quarter-inch in case one has made any miscalculation as to focal-length of lens.

When the lens-board is in place, cut some strips of good black cloth, two 5 inches long and two $7\frac{1}{2}$ inches long, all an inch wide, and

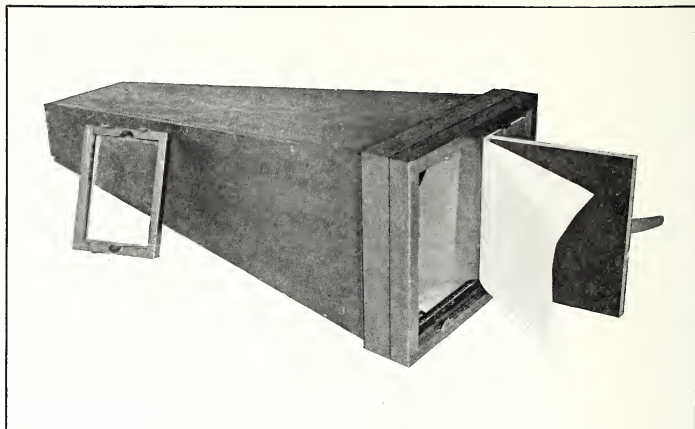


Two pieces
as in Fig 6
and
Two pieces
same shape
4" x 7 1/4"
30" long
All 1/2" thick
drilled with
screw threads



Schlemmer
March, 1911

Fixed Focus Enlarging Camera - Designed for use with ordinary Anstymat



THE FINISHED CAMERA

LEIGHTON P. COLEMAN

glue them in place at "b b" to prevent any light from passing the board in any other manner than through the lens. The board should be glued and screwed fast when its permanent position is exactly known. Get also from the carpenter about four linear feet of $\frac{3}{8}$ -inch square plain whitewood moulding and tack and glue it fast to the outer face of the printing-frame as at "d d," Fig. 1; bevel the edges of the large end of the camera, put printing-frame into place, glue and tack it securely, and by way of finish give the whole camera a coat of dead black outside.

The writer has tried Velox, Cyko, Artura, and other gaslight-papers with equal success, though he rather leans to Soft Cyko on account of its speed; from three to fifteen minutes' exposure, according to negative, being sufficient in March with north light from 10 A.M. to 3 P.M. This factor, of course, would vary as do other exposures, with time of day and year. North light is recommended on account of its being subject to less variation. The camera should be placed close to the window-glass and have an unobstructed exposure to the sky. After exposure, develop and fix or redevelop sepia just as you would for any gaslight-paper. The picture accompanying this article was made with a Goerz Dagor of $6\frac{1}{2}$ -inch focus, and the same lens is used in the enlarger with F/16 diaphragm.

The outlay was as follows:—

One 8 x 10 printing-frame	.....	\$0.50
One 8 x 10 plain glass	.....	.08
One 8 x 10 groundglass	.....	.24
One Kodak 3A printing-frame	.....	.18
One can Dead Black Japalac	.....	.20
One brush for applying	.....	.15
Screw-hooks and screw-eyes	.....	.21
Lumber (whitewood)	.....	1.50
Extra flange for lens	.....	.50
		<hr/>
		\$3.56

From this deduct about one dollar per evening for four evenings' fun during the making, and it will be seen that my enlarger was very inexpensive.



ORGANIZATION in the large or small studio is impossible without information, and you cannot get information without keeping a record of your daily work in a systematic way. The only way to get results out of your help and yourself is to keep a record of what every person in the studio does. In this way you organize facts and create a record of information that will place at your disposal everything that happens in your studio.—*G. W. Harris.*



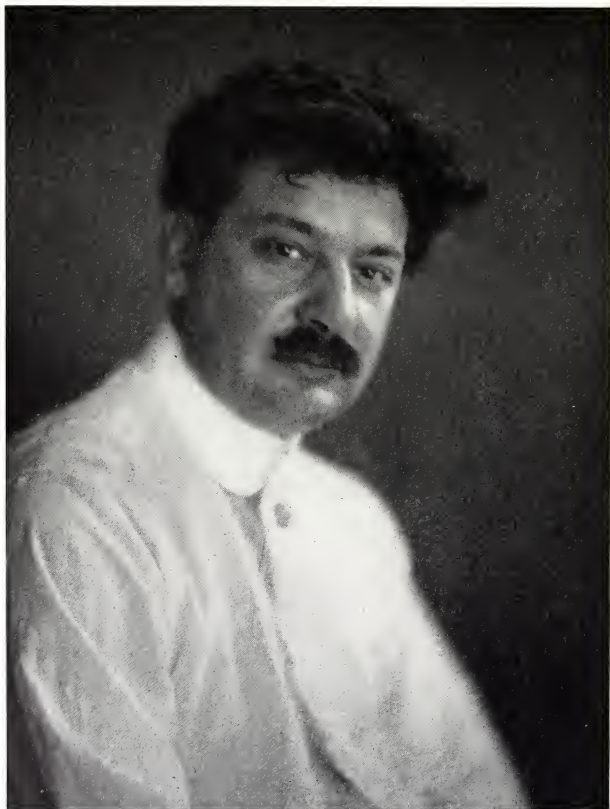
It is with natural *aspect* and not natural *fact* that the painter deals.—*Henry R. Poore.*



WINTER SUNRISE
W. B. DAVIDSON

IN THE DISTANCE
N. PETROW





PORTRAIT OF J. H. GARO
WILLIAM H. KUNZ



Some Notes on Gum-Printing

W. B. MORRISON

THROUGH what depths of discouragement and humiliation other photographers pass in their first attempts at gum-printing, I know not. Not one has ever confided in me, and when I search through the pages of photographic journals for some bit of comfort, I find nothing. Apparently no spoken or written word comes from that valley of discouragement. I know not how many fall by the wayside. Yet some there are who make good gum-prints and when they are good they are wonderful. By this I know that some pass through the valley of silence and go on their way in triumph—successful gummists.

My first sight of a good gum-print was at one of the exhibitions of the American Salon. I came back to that picture again and again, and then and there resolved to have a try at the process. Fortunately I have no record of dates, but I know it was many weeks before I succeeded in making a print which was even passable. This all sounds pessimistic, I know, and seems destined rather to deter than to encourage the beginner. But, as in composing we try to put our lightest light next to our darkest shadow, so let this gloomy preface be but the background to emphasize the satisfaction which comes with a mastery of the process.

To the photographer who has a little of the artist in his soul, the first successful gum-print is as a breath of inspiration. Forgotten now all the failures and discouragements: forgotten those days when it seemed as if the whole thing was not worth while. Now he has a new means of artistic expression, a process powerful and flexible, by which to bring out the beauty latent in his negatives.

Apparently only a small percentage of photographers use the gum-bichromate process. Very little is written on the subject, and almost nothing that is of real practical value. There must be some beginners who are struggling through difficulties similar to mine, and these rather desultory observations are written with a view to help such as have experienced the same troubles as the writer.

No doubt every gum-worker develops more or less a method of his own and there is no need for laying down any hard and fast rules. Personally, I use a coating of equal parts of rather heavy gum-solution and a saturated solution of bichromate. I mix the tube water-color into the gum, rub thoroughly with a pestle in a mortar,

and then add the bichromate. I brush on the mixture with an old paint-brush and smooth out the coating with a two-inch flat badger brush, continuing the brushing until the gum is well set and begins to drag a little. At this stage, hairs begin to come out of the brush and stick to the paper. This used to cause me much anguish of soul until I discovered that it "all comes out in the wash." Now I just let the hairs stay and if one happens to leave a line in the print it disappears with the subsequent coatings.

I have practically abandoned single printing. Two or three printings give so much more depth and so much longer a scale of tones that I find it well worth while. At first I had a desperate time to get my second and third printings in register. A dozen times I was ready to abandon the whole thing. One day in an art-store I picked up Mr. Walter Zimmerman's *Photo-Miniature*, "A New Method of Gum-Printing." Three hours later I had the contents of the book pretty well absorbed and straightway went to work with a new zest. Mr. Zimmerman recommends the "Angora" papers, and I have adopted "Angora" card for all work on smooth-surface paper. It is about one thirty-second of an inch thick, and with its adoption all troubles with register vanished. I made a board about eighteen by twenty-two inches, nailing strips one-half inch high along two adjacent edges. These strips form exactly a right angle with each other. I crowd the corner of my card into the angle formed by these strips, fastening it with thumb-tacks at the upper edge. I lay the negative on the card with the corner crowded down into the same corner of the board. Then a sheet of plate glass laid on top of all holds things firmly. The Angora card does not shrink unless heated, and I think I could coat and print a picture a dozen times without having any printing out of register by so much as one-hundredth of an inch.

I know of no writer on the subject who has laid any stress on the matter of temperature of the developing-water, yet I find it of considerable importance. If a print is somewhat over-exposed and after being floated for twenty or thirty minutes shows an obstinate determination not to "come," try raising the temperature of the water fifteen or twenty degrees. It will hasten matters materially.

Another suggestion which came from Mr. Zimmerman's book, and for which I am grateful to



A MIDSUMMER MORNING

ALICE E. SOUTHER

him, is the use of two or more tones as follows :

Suppose I am printing in brown. I mix for my first coating, say, two parts sepia (in tube water-color) to one part of black. The paper is coated rather lightly and printed strongly enough to fix the highlights with as much color as desired. After development the highlights will be as finally desired, the halftones somewhat lacking in detail and the shadows a mere flat mass of color with no detail at all.

For my second coating I take equal parts sepia and black and print less strongly than the first. In development this coating washes entirely off the highlights leaving them as at the first development. The halftones are now strong and vigorous and the shadows darker, but still lacking detail.

For the third coating I take one part sepia and two parts black and print briefly — just enough to fix the shadows.

If one desires, further coating and printing may be done, but it seldom gives results superior to those reached by three printings.

I almost never use a brush in development unless I wish radically to modify my picture. I find a good method is to lay my print on the sloping end of an ordinary bathtub and dash water over it with the hand, gently or with force, as may be necessary. It is surprising

how much you can localize the effect by this seemingly crude method.

I would not urge any photographer of the press - the-button - somebody-else-does-the-work-type to go in for gum-printing. To any serious worker who is persistent and willing to work hard for results, I say, try it, by all means. You are certain to succeed if you just keep indefatigably at it, thoughtfully profiting by your mistakes.

When you become fairly proficient, try the three-tone triple-printing method which I have described and see whether you ever before obtained such artistic and interesting prints.

[Mr. Morrison's results in three-tone printing justify his enthusiasm. — EDITOR.]



If you divide your business-work into two complete halves you could give one-half to the advancement of business and business-system, and the other to the advancement of art and photography. There is no doubt in my mind but that the average photographer has developed the art and photographic side far in advance of the system and business side, and I would suggest to you that you spend one-half of your time in the developing of the card-index or system side. — G. W. Harris.



A CHILD-STUDY
MRS. W. W. PEARCE



EDITORIAL

Rejected Prints

MUCH fault is found by the authors of pictures which are sent to an exhibition and rejected without an explanation from the jury, except that they have failed to measure up to the required artistic standard. Frederick H. Evans very properly suggests that the jury state its reasons for not accepting some pictures, provided they have been properly entered. In many cases really eligible prints are rejected, simply because the artistic effect was ruined by disastrously bad mounting or framing, but the jury is silent on this or any other point which would explain to the contributors why their pictures were refused. As the jury has the power of selection, it should at least give its reasons for not accepting certain pictures. The man who slips and falls in the street generally feels better when he has ascertained the cause of the accident. This knowledge will enable him to try to avoid another similar experience. So the author of a rejected picture will profit when he knows what was the obstacle to his success, although, of course, the same picture may be entered in some other exhibition. PHOTO-ERA's monthly contests enjoy great popularity, because the author of every unsuccessful picture or set of prints receives from the editor of the Guild Department a comprehensive criticism and thus knows why he failed to win a prize.

Lack of a Uniform Standard

PROBABLY half the troubles of the camerist are due to absence of any fixed standard as between different makers. This is the case even in such details as the size of screw-threads and is markedly so as regards speeds of plates and films. Each maker usually states the average relative exposures required with his different brands; but there is no definite basis for comparison between his plates and those of other firms. One American dryplate-company, however, has adopted the plan, so common with our English cousins, of marking each box with H. and D., Watkins, and Wynne speed-numbers. The first-named is of little value, because the standard conditions, as laid down by Messrs. Hurter and Driffield, are seldom strictly followed. What is needed—and we believe it would be of great commercial advantage to the plate- and film-manufacturers—is an agreement among themselves on a uniform standard

for the testing and marking of each batch with its actual speed. Many users of plates care nothing for an assertion that a particular plate is faster than any other, but they do desire definite information which will allow them to give precisely the right exposure to secure a perfectly-timed negative. We have, in this country, in the person of Mr. R. James Wallace, an authority competent to lay down such standard conditions, and the manufacturers might do themselves credit and secure the desired standard by placing the matter in his hands. At any rate, it is a topic on which some agreement could be reached with benefit to the consumer, who is now without any very definite guide.

Not Entirely the Photographer's Fault

A PROPOS of the numerous suits for damages which have been brought by press-photographers against private individuals for assault, it may be well for a sympathetic public to suspend judgment. These physical encounters between the persistent photographer and the unwilling subject originate simply because the latter wishes to prevent the appearance of his portrait, or that of a friend or relative, in the newspapers. The first step in the objectionable procedure is the photographic exposure, and, by destroying the plate containing the latent image, or by obtaining possession of it, the objecting party thinks himself able to frustrate the ultimate design of the photographer. Without commenting upon the ethics or justice of such a proceeding, we would suggest that the persons who are likely to be the target of a press-camera direct their efforts toward the enactment and enforcement of a law to regulate the publication by the illustrated press of the portraits of private individuals. When this is done, there will be a decided diminution of surreptitious and promiscuous snapshotting. The State of New York for several years has had a law making it a misdemeanor for a newspaper or magazine to publish the portrait of a person without his written consent. The argument set up by a certain portion of the press, that if a person is willing to be seen in public, whether in conventional attire or bathing-costume, he or she cannot reasonably object to be so pictured in the newspapers, is not altogether illogical; but it seems to us that the subject should have the privilege to decide this point for himself.

THE ROUND ROBIN GUILD

An Association of Amateur Photographers

Conducted by ELIZABETH FLINT WADE

This association, conducted under the auspices of PHOTO-ERA, and of which PHOTO-ERA is the official organ, is intended primarily for the benefit of beginners in photography, although advanced camerists are just as welcome and many are numbered among its members. The aim of the association is to assist photographers by giving them information, advice and criticism in the Guild pages of PHOTO-ERA and by personal correspondence. Membership is free and may be obtained by sending name and address to PHOTO-ERA, The Round Robin Guild, 383 Boylston Street, Boston. Send a stamp for complete prospectus.

About Negatives

To make a "good" negative, that is, a negative which is a good-printing negative, one must let light act on the sensitive surface just long enough so that when the plate is submitted to the action of the developer the image impressed on it will come out in correct gradations of lights and shadows, accurately reproducing the relative lightness and darkness of the scene.

Many beginners are unfamiliar with the term "latent image." It refers to the condition of the sensitive plate after it has been exposed in the camera and before it has been subjected to the developer. When a sensitive plate is exposed to the light in a camera the emulsion undergoes a change which is not visible to the eye. The nature of this change has never been fully explained, but the theory is this: The silver bromide and gelatine mixture of which the coating is composed has great sensitiveness to light. As soon as the plate is exposed to the light, the elements silver and bromine begin to lose their affinity or attraction for each other, and are rendered liable to separate when acted on by a chemical able to complete the action. This unstable condition of the portions acted on by light corresponds to the image which afterwards appears. "Latent" means lying hidden or concealed, invisible.

Now, in order to make this hidden image visible, the plate must be submitted to the action of some chemical which shall carry the separation still farther and make visible what has heretofore been invisible. The chemicals which produce this image are called developers, and the process development.

The developer will fail to bring out the image correctly unless the light has had time enough to act on the sensitive coating and bring the decomposition to a certain point. The failure to do this gives us what we call an underexposed plate. Now, while much may be done with an underexposed plate, there is no developer which will continue *insufficient* light-action and carry it on to produce a clear negative with the proper contrasts.

If the light acts too long on the sensitive plate and carries it beyond a certain point, the developer will also fail to bring out a good negative. In this case, however, if one knows that a plate has been overexposed one may prevent a failure by using a developer prepared particularly for overexposures.

There are many developing-agents for bringing out the "latent image" and the beginner is often bewildered by the array listed in his catalog and knows not which to choose. There is one good guide for the brand of plate or film used in one's camera. With each box of plates and each roll of films the amateur will find in the package not only the kind of developer which is best adapted for the plate or film, but also full directions for its preparation and use, so if one uses the developer recommended by the makers of the plate he will be pretty sure of good results. The makers of plates test

all formulæ sent out with their goods and therefore speak of what they know when they direct the developer to be used with their plates.

If the beginner does not wish to mix his own developer — though it is really best to do so — he may buy either solutions or powders made by the firm which makes the plates he is using. The powders need only the addition of water to make them ready and are perhaps the best form in which to buy prepared developers.

The name of the developer denotes the chemical agent used to bring out the image. There are many of these agents, all with more or less claim to excellence. The old developer, which is still a great favorite with photographers who have been in the business a long time and also with amateurs who have worked for years, is, of course, pyro. The editor of the Guild never recommends pyro for the use of beginners, the reason being that it is a powerful poison if accidentally drunk. Then, too, pyro has a tendency to stain the plates, this quality detracting from their printing-qualities, and this happens if development is much prolonged. The modern developers do not stain as quickly — indeed very seldom — unless one uses old developer which has become oxidized and very dark in color.

A developer which has been commended in these columns very often and which members who have used it find most satisfactory is a combination of two developers, metol and hydroquinone. It is called metol-hydro, metol-quinol, and M-Q developer, all meaning that the ingredients are metol and hydroquinone.

The reason why these two agents are combined in one developer is due to the fact that both have different qualities. Metol gives a plate with good detail but without a great deal of density unless development is prolonged. Hydroquinone gives a plate with strong contrasts and good density but without very fine detail in the shadows. By combining the two, one gets a developer which will possess excellent detail and at the same time give good density so as to produce a very satisfactory print.

A formula which is particularly good for all-around work is prepared as follows:

No. 1. Metol and hydrochinon, of each, 30 grains; sodium sulphite, anhydrous, 1/2 oz.; water, 16 oz.

No. 2. Potassium carbonate, 1/4 oz.; water, 10 oz. To prepare for use, take an ounce of each solution and an ounce of water. Six ounces will develop six or eight 4 x 5 plates.

In almost any undertaking one should devise a certain system and follow it each time. This not only simplifies and hastens one's work, but there is less danger of mistakes and blunders. This is particularly true of photographic work, and the darkroom is the one room where one should know exactly the place for everything and have everything in its place. In preparing for development one should put the trays where they can be used most conveniently, the hypo- and developing-trays far



DESIGN FOR A CONTENTS-PAGE

JOHN DOVE

FIRST PRIZE — DECORATIVE FLOWER-STUDIES

enough apart so that there is no danger of getting hypo splashed into the developer. Perhaps as good and safe a way as any is to have the developing-tray at the right of the water for rinsing, and the hypo-tray at the left.

It is needless to say that the plate after being exposed in the camera must not be allowed to be exposed again to the light until after development. In removing the plate or film from the holder one should be at some distance from the red light and the tray also should not at first be placed in the direct rays of red light. The plate is placed in the tray film-side up, and the developer ready mixed in the glass graduate is poured over it with a sweeping motion which causes it to cover the surface of the plate immediately. As soon as the solution is flowed over the plate the tray should be rocked to and fro, not only to insure even covering of the plate but also to bring to the film fresh developer and produce an even development. The rocking of the tray prevents any bits of dirt which may possibly be in the solution from settling on the film and causing spots.

The beginner must be prepared for what will happen when the plate is immersed in the developer. Of course he knows that the image will be reversed; that is, what appeared light in the scene will appear dark in the plate, and what appeared dark will be light. If our subject is a landscape—and that is the most common one for the beginner—the sky, being the lightest, will be the first to appear, for it was the thing which made the first and strongest impression on the plate. The sky will follow the outlines of the horizon so that the beginner will have no trouble in distinguishing the objects in his picture as they come out one after another. If there are trees, the sky which shows between the branches will appear in small black patches, while the outlines of the trees will show distinctly. If there was water included in the view this, too, will come out almost as quickly as the sky, having almost as strong a light on it. The parts of the scene which were in the deepest shadows will be the last to appear. The greens of trees and shrubs also come out very slowly owing to their inability to reflect actinic light strongly.

After the forms of the objects are well out and can be seen distinctly, the plate is lifted from the tray, held up before the red light and looked through to see if the detail is well out. The shadows being the last to appear, unless one can see detail in them when looking through the negative, it is returned to the solution.

After the developer has brought out all the details exposed for, the image begins to fade away and grow

dim. If one now looks on the glass side of the plate he will see the details quite plainly, and if on looking through the plate the highlights—that is the sky and lighter portions—are quite dense and the shadow-details seem buried, the development has been carried far enough and the plate is removed from the developer, rinsed well and placed in the tray of hypo.

The mission of the hypo is to dissolve from the film all the silver salts which have not been acted upon by the light and leave on the plate a clear but reversed image of the scene photographed. The hypo is made up in a strength of one ounce of hypo to four of water. A weaker solution will not always dissolve out the salts, and any undissolved salts spoil the negative. Five minutes is usually enough to dissolve the salts, but it is wiser to leave the plate in thrice that time so as to insure perfect fixing.

The plate is taken from the hypo and washed in running water, or in twelve five-minute changes of water, to remove all traces of hypo, and is then placed in a rack and dried as rapidly as possible, for the sooner a plate is dried the better will be the negative. If the rack is set where the air circulates freely the plate will dry in two or three hours. It should never be subjected to artificial heat nor placed in the sunshine, for when the gelatine is wet it melts easily, thus spoiling the negative.

When the negative is dry it should be placed in one of the envelopes made for storing negatives, its title, number and date recorded in the place marked for such record and then placed in some box or pigeonhole where it is easy of access and can be found at a moment's notice. Its name and number of course are recorded in the book kept for that purpose.

Tank-development is very popular and this process has many advantages over the old one of tray-development, but the beginner who wishes to make particularly fine negatives is advised to learn tray-development so that he may be able to judge what does and what does not constitute a good negative.

Lines and Their Significance

As a rule the amateur pays small attention to lines in his pictures, though they not only have great individuality, but also convey certain impressions.

The horizontal line is called the line of repose, and one can feel this in looking at a landscape where the horizon comes below the center of the plate, as seen in stretches of marsh or meadow, or in quiet valleys.



BOUGAINVILLEA

ANSON M. TITUS

SECOND PRIZE — DECORATIVE FLOWER-STUDIES

The perpendicular line is called the line of severity or dignity. It is a feature of certain kinds of architecture, notably that of Henry the Eighth's Chapel in Westminster and King's College Chapel in Cambridge.

The diagonal line gives the effect of perspective, as will be seen in studying pictures where this line is particularly prominent. One should look for the diagonal line in making landscapes where the view is extended, otherwise the picture will appear flat and wanting in perspective.

The broken or the very abrupt line conveys the impression of force and power. This is seen sometimes in pictures of athletes in action.

The waved or undulating line suggests movement. It also indicates the direction of the movement. This may be seen in pictures of the sea where the waves run in undulating lines, and in some pictures of running water.

The curved line, or line of curvature, as it is often called, is the line of beauty. It is usually employed in the double bend. It is not only an element of all artistic forms, but expresses grace and action. It is inherently beautiful in itself.

The most artistic pictures are those in which the leading lines and forms recur throughout the composition.

Studying the lines of one's pictures with the value of lines in mind, one determines very easily whether he has produced a photograph which will pass muster as an artistic composition.

Cleaning Up for Fall

SEPTEMBER is here, and brings with it the decree of "Work" for those of us not rich enough in this world's goods to play all the year round. But then, "if all the year were keeping holidays, to play would be as tedious as to work." Work is what makes play so enjoyable, and we would miss the zest of play if it were not for our work, though it sometimes seems like a burden "grievous to be borne."

We have the pleasant memories of days spent with our cameras in fields and woods, or by stream or ocean, or possibly high on the mountain-tops. But no matter where our holidays have led us, we have found something worth bringing away with us in our camera, the trouble perhaps being with most of us that we found

too many things worth while and hardly knew where to draw the line or stop using up our plates and films. Of course we have brought back many negatives which are without any value either to ourselves or to anyone else. Now, the first thing to do is to go through the collection and ruthlessly destroy all negatives which are really not worth while. There are so many poor negatives in the world! Let us of the Guild refrain from adding any to the number.

Almost every person has that curious and peculiar habit of saving "things," and attics and lumber-rooms are full of useless articles which might better be thrown away or else given to those less fortunate who might make use of them. Negatives seem to be the one thing the amateur cannot bear to part with. A letter came to the editor recently from a member of the Guild who was about to leave the East for the far West, and among other things photographic this member mentioned the number of negatives made (1500) and now being destroyed, saving only those which were really worth while. It seems a heroic measure to bring one's self to the point of throwing away a negative, however poor. But let us brace ourselves for the effort, look over our negatives and keep only a few, for if the truth were known most of us have only a few negatives worth keeping. Preserve those which have a historical, an artistic or a family value, but bundle all the others into the ash-barrel. Then let us strive not to make any more haphazard negatives but choose our subjects wisely and well.

Shore-Scenes

THE subject set down for our September contest is one which will appeal to all lovers of the sea and the lake. The shores of the sea present many phases of life, from the rugged fisherman in his time-worn dory, drawing in his lobster-pots, to the stately ship riding at anchor, her voyage over, and resting a bit before starting once more to sail the seas. There is no lack of variety in the scenes along the shore of the ocean or of a lake, or river-port, and what PHOTO-ERA wants in this kind of picture is not a view of the shore itself, but of some sport or work particularly significant of the place.

One can easily find such pictures. First there are the old fishermen, types which furnish the most interesting



LOCUST-BLOSSOMS

THIRD PRIZE — DECORATIVE FLOWER-STUDIES

H. S. GRINLESE

studies. Constant encounters with wind and wave give them a certain ruggedness of appearance and set them apart from those who never go down to the sea in ships. Whether one finds them toiling at their calling or sitting idly on the shore telling tales of prowess or adventure, they are always interesting. They need no "posing" to make a picture. Indeed, if one attempts to pose them one spoils the very life of the picture.

One finds many pleasing studies of children along the shore, and children are always admirable for any sort of study. Last winter one of our members sent to the editor of the Guild some studies of children made on the beach which for action were almost equal in composition to those of Sorolla, whose pictures of children on the beach and in the water excited our admiration and envy. While we could not hope to emulate the color we could avail ourselves of the object-lessons in life and movement as depicted by this clever wielder of the brush.

It is not necessary here to speak of the light at the shore, for it is only a short time ago that this subject was written about in detail on the occasion of our contest for watercraft.

Look for interesting subjects, take time to make the picture, and do not include too much within the field of the lens. The simpler a composition of this kind, the more artistic and the more satisfying the print.

Locating a Defect

Editor PHOTO-ERA, Dear Sir:

The common phrase used by manufacturers of labor-saving machinery and devices to the effect that "any child can run it" does not apply to photography. Nothing

short of a thorough knowledge of the art and of the equipment used will answer if uniform results are to be expected. The writer has had a varied experience in photography and has always found, when poor results were obtained, that it was always some "little thing" which caused the trouble.

For instance, not long ago I purchased a Cooke Series III lens of 8 1/4-inch focus, working at F/6.5, and had it fitted to a Premo style of box-camera, which is provided with a detachable back and other modern adjustments. However, even with a high-class lens like the Cooke, the results were varied; and no matter how careful I was in focusing my pictures, they were, as a rule, out of focus. It dawned upon me that possibly there might be a failure on the part of the ground-glass to register uniformly with the plate when inserted in the camera, so an investigation began and to my surprise I found that there was a variation of 3/32 of an inch between the registering-point of the ground-glass and the plate when inserted in the camera.

My next step was to rectify or correct this error. As described by Dundas Todd in the July PHOTO-ERA, I provided myself with a 3/4-inch square stick of stiff wood an inch or two longer than the detachable back. In the center and entirely through this stick of wood I drove a screw, adjusting it in and out with a screw-driver until the point of the screw just touched the ground-glass. Then the plate-holder (minus the slide) was inserted in the camera and the exact difference of registration noted. I found that in order to correct the trouble it would be necessary to drop the ground-glass back the required distance — approximately 3/32 of an



ASTERS
JAMES THOMSON



COSMOS
HARRY D. WILLIAR
HONORABLE MENTIONS — DECORATIVE FLOWER-STUDIES



inch — so my next step was to pare away the rabbit against which the ground-glass rested. This done, it was reinserted and a test again made with the wooden gauge referred to and the registration was found to be practically correct.

I hate to tell the readers of PHOTO-ERA how many disappointments and spoiled negatives came as a result of the lack of registration of the ground-glass and plate when inserted in the camera, as stated. Suffice it to say there were many dollars' worth of them, and all this trouble was done away with in a few moments' time without any expense. I cannot sufficiently impress upon the minds of beginners the vast importance of their having their outfit thoroughly tested before using by some experienced person, particularly if a second-hand outfit has been refitted with a new lens and plate-holders.

Another thing which caused me a lot of trouble at the start was my almost uncontrollable inclination to hurry in getting ready to take a picture. Almost always when one hurries something will be forgotten in the manipulation of the camera, particularly the shutter. My camera is fitted with a Compound shutter, with which the focusing has to be done with the "time" adjust-

ment, and a common mistake of mine was to forget to close the shutter and change the adjustment to "instantaneous" before pulling the dark-slide; and thus a plate was blacked every time. "*Do not hurry in taking exposures*" is something I have learned by experience at considerable expense.

Very truly yours,

HENRY TRAFFORD.



Many pictorial workers wish to obtain a certain amount of diffusion in their negatives, and throwing the lens out of focus does not answer their requirements, because it only transfers the plane of the maximum definition to another part of the subject. Mr. Harper, of the Croydon Camera Club, some years ago pointed out a way successfully to obtain any required degree of diffusion. He stretches over the front of the lens-mount one, two or three pieces of tulle, and thus obtains, in a simple way with home implements, a more effective result than is procurable with special lenses. I have made experiments with this method and am highly pleased with the results. — *E. O. Hoppé*.

The Round Robin Guild Monthly Competitions

*Closing the last day of every month.
Address all prints for competition to PHOTO-ERA,
The Round Robin Guild Competition, 333 Boylston St., Boston, U.S.A.*

Prizes

First Prize: Value \$10.00.

Second Prize: Value \$5.00.

Third Prize: Value \$2.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning picture, or in later issues, will be given Honorable Mention.

Prizes may be chosen by the winner, and will be awarded in photographic materials of any nature advertised in PHOTO-ERA.

Rules

1. These competitions are free and open to all photographers, whether or not subscribers to PHOTO-ERA.

2. As many prints as desired, in any medium except blue-print, may be entered, but they must represent the unaided work of the competitor from start to finish, and must be artistically mounted.

3. The right is reserved to withhold from the competitions all prints not up to the PHOTO-ERA standard.

4. A package of prints will not be considered eligible unless return-postage, at the rate of one cent for each two ounces or fraction is sent with the data.

5. Each print entered must bear the maker's name, address, Guild-number, the title of the picture and the name and month of the competition, and should be accompanied by a letter SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in letter.

6. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA. If suitable, they will be reproduced, full credit in each case being given to the maker.

Notice to Prize-Winners

These contests are open to everybody except those who have won three or more prizes. Such contributors, however, may continue to send work in a special class, as announced in "Our Illustrations" for June. Honors will be awarded only to pictures of exceptional merit.

Subjects for Competition

July — "Gardens." Closes August 31.

August — "Wood-Interiors." Closes September 30.

September — "Shore-Scenes." Closes October 31.

October — "Rainy Days." Closes November 30.

November — "Christmas Cards." Closes December 31.

December — "Home-Scenes." Closes January 31.

Awards — Decorative Flower-Studies

First Prize: John Dove.

Second Prize: Anson M. Titus.

Third Prize: H. S. Grinleese.

Honorable Mention: Beatrice B. Bell, James M. Boisson, Leon Jeanne, Oscar C. Kuehn, George G. McLean, Harry G. Phister, George T. Power, Alice E. Souther, James Thomson, Harry D. Williard.

BEGINNERS' COLUMN

Quarterly Contests for Beginners

In these contests all Guild members are eligible PROVIDED THEY HAVE NEVER RECEIVED ANY PRIZES OR HONORABLE MENTIONS in the past, FROM ANY SOURCE, AND PROVIDED ALSO THAT THEY HAVE NOT BEEN MAKING PHOTOGRAPHS MORE THAN ONE YEAR.

All prints submitted, except prize-winners, will be returned if postage is sent in a separate letter with the data. See rules 4 and 5 in opposite column.

Prizes

First Prize: Value \$5.00.

Second Prize: Value \$2.50.

Third Prize: Value \$1.50.

Honorable Mention: Those whose work is worthy will be given Honorable Mention.

A Definition of the Beginner

COMPETITORS in the Quarterly Contests for Beginners will please take note of the strict definition of the beginner which has appeared in the last few issues of PHOTO-ERA. The tightening of the lines was made necessary by the fact that many contestants sent for these events work which was clearly the output of experts, thus taking advantage of the genuine beginners, viz., camerists of less than one year's experience.

Subjects for Competition

VACATION-PICTURES — CLOSING OCTOBER 15, 1911

It may seem that "Vacation-Pictures" is a pretty broad term, but the editors desire to give the real beginners a chance to enter any good pictures they may make during their summer holidays. For this reason it was decided to make the subject broad enough to include everything which might in any way illustrate the title. Thus, snapshots of landscapes, seascapes, figures, animals, buildings and any other objects which offer good compositions or interesting pictures may be included.

To get the greatest benefit out of these quarterly contests, each Guild-member who is thinking of entering any prints should undertake a little course of study covering the field in which he contemplates working. There are plenty of booklets for beginners, some on the photographic processes themselves and others on special fields, such as hand-camera work, marines, landscapes, and orthochromatic photography. These the clerks in the stock-houses will be only too glad to get for you. Technical excellence is necessary if the pictures are to have a chance of success. The negatives must be properly exposed and developed and the prints as good as you can make from them. But the intelligent worker will do more than make a good photograph; he will select his subjects with regard to the laws of composition and remember that some definite idea must be present in his mind to justify the exposure. Perhaps the easiest general rule is to secure simplicity by working close to the subject so as to get a large image and thus exclude extraneous objects, particularly such as would come out nearly white in the print and distract the eye from the principal object.

GENERAL — OUTDOORS — CLOSING JAN. 15, 1912

Any subjects, landscapes, figure-studies, genre, marines and animals.

GENERAL — INDOORS — CLOSING APRIL 15, 1912

Similar to the one above, but strictly interior-views.

Answers to Correspondents

Readers wishing information upon any point in connection with their photographic work are invited to make use of this department. Address all inquiries to ELIZABETH FLINT WADE, 743 East 27th Street, Paterson, N. J. If a personal reply is desired, a self-addressed, stamped envelope must be enclosed.

JAMES V.—To Obtain an Engraving-Black on Bromide Prints Use Amidol Developer. Amidol, 30 grains; sodium sulphite, 300 grains; potassium bromide, 5 grains; citric acid, 5 grains; water, 10 oz. Stir the solution well and filter before using. The image appears quickly, but the print should be left in the developer long enough to gain good density. The color is a rich black, which may be enhanced by brushing the print over with artists' fixatif, as recommended in answer to Frances Clark, which see.

DON J. Z.—In the formula to which you refer the word "anhydrous" as applied to sodium sulphite means dry. The sodium sulphite comes both in crystals and in dry powder. If a formula calls for "anhydrous" sodas and you have the crystals, then use twice as much of the crystals as the formula calls for.

O. H. G.—The camera about which you ask and of which mention was made in PHOTO-ERA for April is not yet on the American market. It is expected that a camera similar to this will soon be put out by one of our leading manufacturers, but cheaper than the English make.

F. SAINT-P.—Use the same formula and the same proportions for **Rodinal** as that given for tank-development. Both plates and films may be developed by this developer, which produces very satisfactory negatives.

WALLACE C. ARBUCKLE.—An Acid Fixing-Bath will fix a certain number of prints before it becomes exhausted. The bath could be tested, but it would hardly pay. The ingredients are cheap, and when one has fixed a certain number of prints it is wisest to throw the solution away and prepare fresh. Yes, when you substitute a different lens, the **focusing-scale** of the camera will need to be changed. It is not much trouble to do this, and requires only a few experiments to determine the correct distances.

H. S. JAEGER.—Slight Discoloration of Metol Developer will not affect its developing-qualities. If badly oxidized it will stain the plate and should be thrown away. Use a slow plate and expose for about one-half minute to get a good copy of an old photograph. See article on copying in a recent number of PHOTO-ERA.

GERALD C. MARTIN.—Cloth May be Rendered Waterproof by immersion in a solution prepared as follows: Linseed oil, 1/2 pint; yellow bees-wax and turpentine, of each 1/2 oz.; Burgundy pitch, 1/2 oz. Melt all together and when the ingredients are dissolved dip the article to be waterproofed into the liquid, drain, and let dry. Another way which is said to be very efficient is to soak the cloth in a rather weak solution of isinglass, and when dry to dip it into an infusion of outgalls.

MRS. FRANKLIN ROGERS.—In the Package of Acid Fixing-Powder, the powder in the small box is the acid and the other powder in the larger box is hypo. **The table of exposures** in PHOTO-ERA is for films as well as for plates. If you will look in the list of plates you will see under which class the films come and you can govern your exposures accordingly.

W. FARRER.—If you wish a **Cheap Proofing-Paper**, get a gross of cabinet seconds. They cost only \$1.00 a gross. You would find it rather a complicated matter to make your own proof-paper. One has to have certain apparatus when making it on the large scale you propose and it would need quite a bit of practice to apply the solution evenly so as to get good results.

BEN. MASON.—You can get a **Squeegee or Print-Roller** for 30 cents, six-inch size. A double roller of ten-inch size will cost you 85c. A **Set of Scales** which will weigh from half a grain to half an ounce may be bought for 60c.

KATE RYAN.—Do Not Attempt to Cut Lantern-Slide Mats. You can buy them very cheaply, a box containing 100 costing only 50c. Some mats are made with waterproof finish, but they are more expensive and are really no better than the mats cut from the ordinary black paper. The difficulty in cutting one's own mats is the trouble not only to get a smooth edge which will not show ragged on the screen, but also to center the opening correctly.

CELIA HUNT.—The Coating on Blueprint Paper will wash off if it has not been exposed to light. It would seem hardly worth while to try cleaning the paper and resensitizing, because the blue-paper is so very cheap that it would not pay for the time and trouble of reclaiming the old. Better throw it away and use fresh paper.

ROY DEANE.—To Remove Varnish from Negatives, soak them for a short time in methylated spirits, then rub the surface gently with a piece of absorbent cotton. If the varnish does not all come off, soak again in the spirits and then rub once more. If soaked the second time one must be careful not to abrade the film, as it becomes softened if left long in the spirits and is easily torn.

MORRIS TEAL.—A Salting-Bath for Paper is made as follows: Ammonium chloride, 60 grains; gelatine, 20 grains; water, 20 ounces. Float the paper on this solution till thoroughly saturated, then pin up to dry. Salted paper will keep for some time, but the best results are obtained on paper which is freshly salted.

D. L. G.—Do Not Use Ready-Prepared Mucilage for Gum-Prints. The commercial mucilage is not pure and it is likely to be sour, both characteristics being injurious to gum-prints. Prepare your own mucilage, using an ounce of best white gum Arabic dissolved in five ounces of water, then strained through two thicknesses of cheesecloth or of fine muslin. To dissolve the gum easily, put it into a bottle and set the bottle on the stove in a dish of hot water.

ALLEN S. T.—Prices Paid for Photographs vary according to the value of the subject and also among different papers. Some papers pay as high as a hundred dollars for a good cover-design; other papers—farm papers, for instance—pay as low as 50c. for a print. If the subject is unusual, one can generally get a very good price for his picture. Study the illustrated papers and see what kinds of pictures they use, then determine whether you can do anything in their line. The illustrated weeklies like pictures of current news-events.

SAMUEL R. C.—Your Negatives Intensified with Mercuric Chloride may be Restored by immersing them in a fifteen-grain solution of Schlippe's salts—fifteen grains to an ounce of water. The intensification may be wholly removed by immersing the plates in hypo, watching them well and taking them out as soon as the intensification is reduced. They can then be reintensified or redeveloped, usually with very satisfactory results.

FRANCES CLARK.—Your Bromide-Prints and Enlargements which look dull may be brightened by

applying a coat of artists' fixatif. This is not a varnish and does not give a shiny look to the print. It brings up the detail and gives depth to the tone. It may also be used to great advantage with dull platinum-prints.

H. L. KEENE. — **A Stock-Solution** is a concentrated form to be diluted with water when needed for use. Some chemicals keep well in solution, and others deteriorate very rapidly. To preserve them, coat the cork and the neck of the bottle with melted paraffine wax.

ANN F. SLOCUM. — **There are no Fees or Dues in the Round Robin Guild.** Any amateur may become a member by sending name and address to the editor and signifying his desire to join the association. Its aim is to promote fellowship among amateurs, to render assistance in photographic work, and to raise the standard of amateur photography. The Guild now numbers over two thousand members scattered all over the United States, in Canada, England, etc., even as far away as Australia and New Zealand.

Print-Criticism

Address all prints for criticism, enclosing return postage at the rate of one cent for each two ounces or fraction thereof, to ELIZABETH FLINT WADK, 743 East 27th St., Paterson, N. J. Prints must bear the maker's name and address, and should be accompanied by a letter, sent separately, giving full particulars of date, light, plate or film, stop used, exposure, developer and printing-process

"THE BROOKSIDE." L. F. — This picture shows a tiny stream slipping along through a piece of marshy ground and losing itself in the woods in the middle distance. In the foreground graceful reeds bend over the water, while a little farther along the stream turns, and a small footbridge half hidden by tall weeds spans the bit of water. This picture is excellent in composition, the artist having used his ideas of arrangement to good advantage, but the exposure was evidently made at high noon, for the shadows are black and heavy while the highlights are strong and harsh. The sharp contrasts of light and shade spoil the quality of the picture and give it an unpleasant appearance. This negative might be printed on a paper sensitized for soft contrasts and improve it somewhat, but if the artist has an opportunity to repeat the subject it would be much wiser to make another negative, choosing early morning or late afternoon, or else a day when there are plenty of clouds in the sky.

"GRANDMOTHER." F. E. K. — One would hardly take the picture of this very up-to-date looking woman to be that of a grandmother. However, the day of the old-time grandmother with cap and apron, spectacles and wrinkles, has practically passed by, so that we must revise our ideas of grandmothers and bring them down to the present-day grandmother, who in some instances is really as young in many ways as her granddaughters. This is a very good portrait, and though the gown is very fashionable it is in such good lines that one does not mind its style. The only thing about the picture that would seem to give excuse for the title is the tiny baby snuggled close in the arms of the grandmother, half concealed in a lace slip, one infinitesimal hand clasping the finger of the dear young grandmother. It would seem a better title to call this picture, "Her First Grandbaby" for it will be many a day before this alert, active-looking woman will have reached that age when one can safely call her grandmother. As a portrait-study the picture is very good, but it should be finished in soft gray instead of sepia.

PUZZLED. L. H. G. — The maker of this picture started out to do something quite interesting. He failed because he did not understand, or if he understood he did not observe, the rules of good composition. The materials for the picture were a table, a slate, a book, a child and a chair. The idea was to represent the child as working a sum in arithmetic and having come to an insurmountable obstacle. The objects are arranged as follows: First, the table placed in the foreground and showing the top only; second, book and slate arranged on the table; and behind the table the child in the chair with a pencil in his hand. The child is placed at the weakest point in the picture, the center. The book and the slate, being nearer the lens, are out of proportion to the child who is using them, being much too large in appearance. The chair has two straight spindles at either side of the back which reach above the head of the child and which catch the light sharply owing to their polished surface. The only thing about the picture which is really worth while is the expression which the artist has succeeded in getting on the child's face. This is admirable, and the little fellow actually looks as if he were puzzled over his example. Now what would you, dear Guilders, who read this criticism, have done with the materials which compose this picture? We would very much like to hear from some of you and to print your suggestions as to the arranging of such a picture.

DAISY. S. S. E. — This is a very clever study of a pretty Jersey cow. It has been coaxed up to the house door and is eating some dainty from the hand of a little child. The cow herself is in the foreground, is well posed and the space on the plate is filled well to make a good composition. The part which calls for criticism is the strong highlight at the lower left corner caused by a large stone which has been whitewashed having come within the field of the lens. This is the object on which the eye rests when first looking at the picture. If this were trimmed away the picture would lose balance, but it should be painted with water-color to the tone of the surrounding objects. Two other prints sent by the same artist are very good in technique, but lack originality of treatment and artistic merit.

NEW GUILDERS, ATTENTION!

Sending Prints Safely

It is strange that workers sending us prints persist in enclosing them between sheets of cardboard with the corrugations running in one direction. Photographs sent thus, or placed against one single sheet, very seldom reach their destination safely. *Prints should first be wrapped in soft paper, and then placed between two pieces of cellular board — the kind which is covered on both sides — with the corrugations running in opposite directions.*

How to Send Stamps

READERS are requested not to send postage stamps loosely placed in the envelope either before or after the insertion of the letter. In extracting the letter, the stamp remains in the envelope unless the recipient takes care to look into the envelope. Some thoughtless persons take a number of stamps and fold them so that the backs shall come together, which is not so bad as to have the backs cover the face. If the letter happens to be in a warm place during transit, the stamps become glued together and must be soaked apart by the recipient. The proper way is to moisten a small place in the center of the stamp and attach it to an upper corner of the front page of the letter. Or, if there are a number of stamps, they can be safely enclosed in paraffine-paper, which prevents them from sticking to each other during transit in the mails.



TAKING HIMSELF SERIOUSLY

From Life.

The Camera-Craftsmen

THE newly organized portfolio club of which mention was made in the issue for April has adopted the name of The Camera-Craftsmen, suggested by Miss Bingham. This name seems well to indicate the character of the club, which is intended to include only true craftsmen of the camera.

Five new members have been elected, and from the large number of affirmative votes received, these gentlemen should feel sure of their welcome; and the club is expecting some very interesting work to be shown by them.

Each portfolio shows improvement over the one before it, and the director is much pleased at the way in which the members fill in the criticism sheets.

One of the new members wrote to the director when the portfolios reached him for the first time: "Am having a pictorial feast," and from other expressions of like sentiment received in the course of the portfolio's round, the club seems to be beneficial.

The club has reached within one of the limit which has been set, and but for the fact that it is thought best not to increase the representation in certain districts, there would be a fair-sized waiting-list.

Roy C. Burckes, Director.

Plate-Speeds for Exposure-Guide on Opposite Page

Class 1/3

Lumière Sigma

Class 1/2

Barnet Super-Speed Ortho
Ilford Monarch
Seed Gilt Edge 30

Class 3/4

Barnet Red Seal
Defender Vulcan
Ilford Zenith
Imperial Flashlight
Eastman Speed-Film
Seed Color-Value
Wellington Anti-Screen
Wellington 'Xtra Speedy

Class 1

American
Ansco Film, N. C. and Videl
Barnet Extra Rapid
Barnet Ortho Extra Rapid
Barnet Studio
Cramer Crown
Defender Ortho
Defender Ortho, N.-H.
Ensign Film
Hammer Special Extra Fast
Imperial Special Sensitive
Imperial Non-Filter
Imperial Orthochrome Special
Sensitive
Kodak N. C. Film
Kodoid
Lumière Film
Magnet

Premo Film Pack
Seed Gilt Edge 27
Standard Imperial Portrait
Standard Polychrome
Stanley Regular
Wellington Film
Wellington Speedy
Wellington Iso Speedy

Class 1 1/4

Cramer Banner X
Cramer Instantaneous Iso
Cramer Isonon
Cramer Spectrum
Eastman Extra Rapid
Hammer Extra Fast
Hammer Extra Fast Ortho
Hammer Non-Halation
Hammer Non-Halation Ortho
Seed 26x
Seed C. Ortho
Seed L. Ortho
Seed Non-Halation
Seed Non-Halation Ortho
Standard Extra
Standard Orthonon

Class 1 1/2

Cramer Anchor
Lumière Ortho A
Lumière Ortho B

Class 2

Cramer Medium Iso
Ilford Rapid Chromatic
Ilford Special Rapid
Imperial Special Rapid
Lumière Panchro C

Class 2 1/2

Barnet Medium
Barnet Ortho Medium
Hammer Fast
Seed 23

Class 3

Wellington Landscape

Class 4

Stanley Commercial
Ilford Chromatic
Ilford Empress
Cramer Trichromatic

Class 5

Cramer Commercial
Hammer Slow
Hammer Slow Ortho
Wellington Ortho Process

Class 8

Cramer Slow Iso
Cramer Slow Iso Non-Halation
Ilford Ordinary

Class 12

Cramer Contrast
Ilford Half-tone
Seed Process

Class 100

Lumière Autochrome

Exposure-Guide for September

Exposure for average landscapes with light foreground; river-scenes; figure-studies in the open; light-colored buildings and monuments; wet street-scenes, with stop F/8 (U. S. No. 4) on Class 1 plates.

Hour	Bright Sun	Cloudy-Bright	Cloudy	Dull	Very Dull
10 A.M. to 2 P.M.	1/32	1/16	1/8	1/4	1/2
9 A.M. and 3 P.M.	1/25	1/12	1/6	1/3	2/3
8 A.M. and 4 P.M.	1/16	1/8	1/4	1/2	1
7 A.M. and 5 P.M.	1/6	1/3	2/3	1 1/3	2 2/3

For other stops multiply by the number in third column.

F/4	U. S. 1	× 1/4
F/5.6	U. S. 2	× 1/2
F/6.3	U. S. 2.4	× 5/8
F/7	U. S. 3	× 3/4
F/11	U. S. 8	× 2
F/16	U. S. 16	× 4
F/22	U. S. 32	× 8
F/32	U. S. 64	× 16

The exposures given are actual—not nominal shutter-speeds. With some shutters, $1/100 = 1/40$ to $1/60$; $1/50 = 1/30$ to $1/60$, $1/25 = 1/15$ to $1/30$; $1/5 = 1/2$ to $1/10$, etc. If you do not test your shutter, you will have to learn by experience which speed-marking to use. Exposure may often be better regulated by changing the size of the stop than by altering the speed of the shutter. With focal-plane shutters, give $1/3$ to $1/6$ the indicated exposure. No manufacturer can make plates *absolutely* uniform in speed, but a given brand will average about as listed in our tables.

SUBJECTS. For other subjects, multiply the exposure for average landscape by the number given for the class of subject.

- | | |
|---|---|
| <p>1/8 Studies of sky and white clouds.</p> <p>1/4 Open views of sea and sky; very distant landscapes; studies of rather heavy clouds; sunset and sunrise studies.</p> <p>1/2 Open landscapes without foreground; open beach, harbor and shipping-scenes; yachts under sail; very light-colored objects; studies of dark clouds; snow-scenes with no dark objects; most tele-photo subjects outdoors; wooded hills not far distant from lens.</p> <p>2 Landscapes with medium foreground; landscapes in fog or mist; buildings showing both sunny and shady sides; well-lighted street-scenes; persons, animals and moving objects at least thirty feet away from the camera.</p> | <p>4 Landscapes with heavy foreground; buildings or trees occupying most of the picture; brook-scenes with heavy foliage; shipping about the docks; red brick buildings and other dark objects; groups outdoors in the shade.</p> <p>8 Portraits outdoors in the shade; very dark near objects, particularly when the image of the object nearly fills the plate and full shadow-detail is required.</p> <p>16 Badly-lighted river-banks, ravines, glades and under the trees.</p> <p>32 Wood-interiors not open to sky and with dark soil or pine-needles.</p> <p>48 Average indoor portraits in well-lighted room, light surroundings, big window and white reflector.</p> |
|---|---|

PLATES. When plates other than those in Class I are used, the exposure indicated above must be multiplied by the number given at the head of the class of plates.

THE CRUCIBLE

A MONTHLY DIGEST OF FACTS FOR PRACTICAL WORKERS

With Reviews of Foreign Progress and Investigation

Conducted by MALCOLM DEAN MILLER, A.B., M.D.

Readers are encouraged to contribute their favorite methods for publication in this department
Address all such communications to The Crucible, PHOTO-ERA, 383 Boylston Street, Boston

Non-Reversing Plates

MR. E. SANGER-SHEPHERD read a paper before The Royal Photographic Society on "The Cause of Reversal and Its Remedy." He explained that the communication which he was making that evening formed part of several series of researches carried out by Mr. W. Hay Caldwell, whose name was doubtless known to many of them as an investigator in photographic processes. In order to make clear the progress which Mr. Caldwell had attained in emulsion-making, he (Mr. Shepherd) would go back to the classical curve of a plate of Hurter and Driffield, in which there were three portions corresponding to the periods of under-, correct, and over-exposure, and a fourth corresponding with the phenomenon known as reversal. Messrs. Hurter and Driffield had shown that in order that a negative might be a true representation of the subject photographed, it was necessary that the exposure should fall within the straight part of the curve, viz., that of correct exposure, and Messrs. Hurter and Driffield's dictum, though it had been modified to some extent by subsequent work of their own and others, nevertheless still held good for plates and developers as at present used.

In considering the action of light on the plate, Mr. Shepherd assumed the correctness of the theory according to which a sub-salt, or sub-halide, of silver is formed, the liberated halogen being absorbed, or, when remaining unabsorbed, leading to reversal phenomena. Now Mr. Caldwell had found that certain substances which could be added to the emulsion possessed the property of being incapable of reduction in light after oxidation by the liberated halogen; also of not reducing the silver salt in the dark, and, thirdly, of absorbing the halogen as rapidly as it was liberated by exposure to light. These substances were the salts of hydrazine, or of hydroxylamine, which could be either added to the emulsion or applied to coated plates as a bath. The result of making an increasing series of exposures on such plates was that the straightline "curve" of Hurter and Driffield, instead of passing into the characteristic period of over-exposure, was continued as a straight line; in other words, the practical effect of giving even the most excessive degrees of over-exposure was that the gradation of the plate was retained, although, with normal development, the densities produced were very much greater. He, Mr. Shepherd, had made negatives on the new hydrazine plates, giving in one case the normal exposure, and in others increasing degrees of exposure up to 5,000 times, and still obtaining negatives which would be described as perfect. In the case of greatly excessive degrees of exposure it was, of course, necessary to use a very dilute developer. Just as the plate was incapable of showing defects due to over-exposure, so, also, reversal, so far as his experiments had gone, could not be produced. He showed lantern-slides of an electric incandescent lamp and an electric arc, in each case taken on an ordinary plate and on one prepared with the hydrazine emulsion. In the case of the ordi-

nary plate the filament of the lamp and the focus of the arc were both completely reversed, showing as black in the positive lantern slide. In the case of the hydrazine plates reversal was absent, the filament and the arc of the lamp forming the highest light in the lantern-slides. Mr. Sanger-Shepherd pointed out that such striking results as these opened up a new field in practical photography. So long as sufficient exposure was given it did not matter, within the widest limits, what the actual time of exposure was. And development might easily be reduced to an entirely automatic process, the time of which, unless the degree of over-exposure was outrageously excessive, might be fixed. His own preference was for a time of development of two minutes. He did not think they should be called upon to spend more than two minutes on the development of a plate. It was a convenient time, which allowed of plates being placed in the developer, covered from light, and then, by the time a cigar had been comfortably lighted, development would be about complete. He could not say that a system of development had been completely worked out as yet for the hydrazine plates, but it probably would be within a very short time.

Another important effect of the use of hydrazine in the emulsion was that a plate, or paper, might be either printed out like P.O.P. or partly exposed and developed in the ordinary way. He showed a series of prints, some developed and others printed-out, but all made on paper cut from the same sheet. In this connection it was also important to note that the gradation of the print remained the same, although the method of production was so entirely different. The plates or papers which were printed-out, could be simply fixed in ordinary hypo, when they gave a pleasing warm tone, or then could be gold-toned in the usual way, or over-exposed (for development) so as to give a series of warm tones, in each case with retention of the gradation. All Mr. Sanger-Shepherd's experiments had been made with the high-speed hydrazine plates at his disposal, and having a speed of 400 H. and D. Fast as these plates were for camera-exposures, when printed-out the image was of a fineness and color such as would be attained on a slow gelatino-chloride transparency-plate.

A Developer for Underexposure

MR. ADOLPHE ABRAHAMS has recently published a book on "The Photography of Moving Objects" in which he recommends the following developer for under-
timed focal-plane exposures:

Water	20 ounces
Sodium sulphate, anhydrous	1 ounce
Sodium carbonate, dry	1 ounce
Potassium metabisulphite	¼ ounce

For use take 6 drams of solution, 18 drams of water and 3 grains of dry pyro. The bath is used at 65°F., with constant rocking, until reduction ceases; when, if density is lacking, the plate is treated with 1 ounce stock-solution, 2 ounces water and 5 grains of pyro.

BERLIN LETTER

MAX A. R. BRÜNNER

IN the early summer months an exhibition was opened in Berlin exclusively devoted to traveling and tourist matters, the first of its kind ever held. Its aim is to present the attractive features of the innumerable health- and pleasure-resorts in the mountains, on the coast, and inland. Photography plays a great part in an undertaking of that kind, not only because cameras and accessories are also represented, as indispensable to the typical tourist, but also because nine-tenths of all pictures placed on exhibition or reproduced in booklets were made by some photographic process. In fact, pictures exist of practically every spot in the German empire, however remote, and most of these are reproduced on pictorial postcards, in souvenir albums or in brochures. Printing in the fatherland stands on a high level as regards artistic design and skilful execution, so that millions of pictorial cards showing American or British places of interest are "made in Germany," although this well-known term is sometimes replaced by "printed in Saxony" or "printed in Bavaria."

It is true the German empire is full of natural beauties and historic spots and the conservative and artistic sense of the population helps to preserve these valuable treasures. In the photographic department of the Travel Exhibition arranged by the noted Berlin dealer, Walter Talbot, the tourist is given many hints how to equip himself if he intends to take pictures while on tour. We notice two walls covered with pictures made on various grades of Gevaert paper; and the well known Vienna firm, Carl Ernst, exhibits every thing designed to complete our snapshots, such as vignettes, souvenir-files and albums, cardboards and frames. The noted Voigtaender Optical Works are represented by telescopes and their high grade lenses, also cameras. The same applies to Emil Busch of Rathenow. The Ica Company, Limited—that big concern of four large German camera-works—places on exhibition combination-cameras which contain the best features of each camera formerly made by the separate firms. Of course, an excellent product is thus obtained and we find improvements combined in it which were formerly a patent or monopoly of the single factories. Arndt & Loewengard of Wandsbeck show us their noted Leonar papers, while Mr. Talbot is represented by practically every article used by the amateur. All firms have exhibited a series of fine prints used for advertising-purposes, mostly showing subjects related to traveling. Many a visitor may have been induced to become a photographer by seeing the fine exhibits of this notable department—or, indeed, of the whole exhibition.

Travelers are of course badly in need of darkrooms when exchanging exposed plates for fresh ones. The league of German Amateur Clubs has collected with great trouble the addresses of all dealers, studio-owners, and hotels with darkrooms which are placed at the disposal of customers or of travelers. These valuable addresses have been classified according to province and city and the list is sold in the shape of a handy booklet for the small fee of ten pfennigs (or 2 1/2 cents), a copy. It contains not only German, but also Austrian and Swiss addresses, and any American tourist taking pictures while "doing Europe" should procure a copy.

I spoke above of the printing-trade in Germany. This business is indeed remarkable both with respect to quality and to quantity. Probably it heads all nations

of the world and statistics prove that in Germany more books are printed and published than anywhere else; and as regards periodicals only the United States reaches similar high figures. As a consequence of the phenomenal number of books and journals published here, our libraries quickly become filled and soon have no available space for further additions. Every new library is designed of course larger than is necessary for its immediate requirements, yet it is a fact that after a few years all the space is completely taken up. Two learned men, a bibliographer and a scientist, have now collaborated to give librarians a new practical method for the preservation of the numerous valuable documents existing as well as those of the future without the necessity of enlarging the building where they are stored. The civil engineer Goldschmidt and the general secretary of the Brussels International Institute for Bibliography, Mr. Otelet, have devised a system of a microscopic library. Their proposal is not to preserve the book or the manuscript but merely a photograph of it. Whoever wishes to read these, has to obtain in such a library the lantern-slides of the various pages and sheets, which are then thrown on a screen by means of an ordinary magic lantern. This system may at first sight seem costly and cumbersome, but the inventors have brought it to a high state of perfection. They have succeeded in getting the contents of 72 printed pages on an ordinary negative 9 x 12 centimeters. Consequently a bulky volume of 1,000 pages, or even an encyclopedia of a hundred times as many, would occupy a comparatively small space. If we go a step further and stock only the prints of these negatives (which of course must be read with a strong magnifying-glass) the space for storing the originals can be reduced to a surprising minimum. The term "microscopic library" is therefore quite justified. As we have seen, the technical difficulties are very small and the same may be said of the expenses compared with the results gained. In an hour about seventy large printed pages can be photographed.

Possibilities hitherto unthought of are now accessible to librarians, learned people and statesmen. At small cost the former can procure the bibliographical rarities and treasures of their sister institutes. What formerly cost thousands, can now be had for less than hundreds; what previously has been stocked in a wing of a building now finds room in a box or drawer. Furthermore, the printed or written text may not only be acquired and preserved, but also the illustrations, the beauty of old sketches and miniatures, the impressive and instructive clearness of modern pictures. The individual learned man may now procure a whole set of books and articles for his special field of study at a low price by purchasing prints of such negatives. In a word, the microscopic library will benefit all public libraries, authors and teachers and be another excellent medium for mental exchange.

Plates Ruined by Flies and Water-Bugs

IN drying plates after they have been fixed and washed, it is well to place them beyond the reach of insects, particularly flies and water-bugs, both of which insects are very fond of wet gelatine as an article of diet. It is a common occurrence that plates are left drying in rooms which are believed to be perfectly safe in every respect, no thought being paid such an apparently trivial matter as insects. In drying them in the open overnight, moths, ants and other insects are very likely to attach themselves to the sticky surface of the plates and, of course, cause irreparable damage. Moths, too, are likely to settle out of the air and grow in such a convenient culture-medium, the colonies liquefying the gelatine and causing round spots.

LONDON LETTER

E. O. HOPPÉ, F. R. P. S.

THE bold move of the Organizing Committee of the Royal Photographic Society's Exposition proved to be an unqualified success. As I have already stated in a previous letter, the society had lost the fine gallery where for many years the annual exhibitions were held. The new premises that were found—the Prince's Skating Rink—seem quite palatial in comparison with last year's accommodations. The change also from the autumn to the spring was a step in the right direction and one that has been advocated for many years by a number of well-wishers to the society. The principal attraction, to the lay visitor at any rate, was the collection of sixteen photographs taken and lent by her Majesty Queen Alexandra and the group of some sixty photographs by professional photographers of our late beloved king. There was also a photograph of King Edward taken by the President of the Society, Lord Redesdale. Of historical interest were the prints by Rob. C. Murray, taken in 1853; those made by Vernon Heath in 1864, and those by the famous photographer Mayall. The first is the oldest photograph made from a print, and in it the Prince Consort, the Prince of Wales, and Prince Alfred (Duke of Edinburgh) were pictured listening to a lecture by Faraday at the Royal Institute. One of the first (and finest) specimens of composite photography was the one by Vernon Heath, a group of King Edward and Queen Alexandra and the infant Prince Albert Victor.

There was another innovation, viz., the division into two groups of the pictorial section, Class I being reserved for pictures with outstanding pictorial aim, whereas Class II was meant to include work which was interesting, chiefly on technical grounds. In reality it must be confessed that it was difficult to see why some of the prints which were in Class II did not find their way into Class I, and vice versa; for there was but little difference in the quality of the work shown in the two classes. As a whole, the work was up to the standard of previous years; but there was nothing of outstanding merit. Mewburn, Lewis, Berry and Lomax are newcomers who deserve praise and who lead one to expect good things in the future. One of the best, if not the best picture in the section was No. 21, "The Swan," by Baronin Viola von Riederer of Munich (not Riederen, Rieveren or Rievere as the official catalog and some of the photographic journals miscalled her).

By far the most interesting section in the exposition was the one devoted to scientific photography. Among the works shown, special mention should be made of the curious moonlight-suggestion effects obtained by Professor R. W. Wood by means of infra-red rays, and of the collection of records illustrating the action of a machine for the quantitative analysis of sound, shown by A. E. Bawtree. T. W. Butcher had some fine examples of high-power photomicrography, Dr. Thurstan Holland some excellent radiographic subjects, and Professor Zeeman some remarkable results in spectroscopy. To these three exhibitors medals were awarded. There were very few floral but a good many illustrations of fauna. Of the latter, Henry Irving's yawning jaguar, C. F. Hayward's cat-studies, Oliver Dike's carrion crow and Miss F. Pitt's fox-cubs called for special attention.

The color-section was well supported and contained over 150 examples. Dr. Drake-Brockman, who is well known for his splendid Autochromes in connection with medical work, had some really wonderful examples of

hawk moths, Dr. Max Wolf an interesting series of astronomical slides, and E. A. Barton a charming picture of crocuses.

The only two American exhibitors were Frederick Eugene Ives, who showed his Tripak system of color-photography; and C. F. Clarke, with a pleasant bromide print of good tonal values entitled "A Dreary Road."

The talk of the town is the announcement by the Paget Prize Plate Company of the marketing of a non-reversing plate. As is well known, the range of possible exposures of a plate (or paper) is commonly referred to as "latitude." We know that this range of exposures varies according to the sensitiveness of the material employed. In each case, however, it must not be less than a certain minimum or more than a certain maximum. If the exposure is in excess of the maximum, "over-exposure" results, and finally "reversal of the image" appears. The claim for the new plate is that it will not reverse, no matter how long the exposure lasted. Though the speed of the plate is slightly lower than that of the quickest on the market, it is said not to have any effect upon its color-sensitiveness. The speed of the new plate is about 400 H. & D. I hope to give full details of this wonderful new product in my next letter.

The organizers of the Exposition of Sporting-Goods, Games and Pastimes have adopted a suggestion frequently made by various workers with regard to the authorship of photographic pictures. From time to time it was urged not to publish the names of exhibitors until the close of the exposition, so as to do away with every possibility of favoritism for certain pictures. Personally I do not at all agree with the suggestion, which—to me—seems to imply an insult to selecting-committees, though I am quite convinced that this was not intended by those responsible for the suggestion. In the Sports Exposition prizes to the value of \$125 are being offered for the best pictures, the authors of which will not be disclosed to the judges until the awards have been made.

At the Alpine Club we had an exhibition of photographs, interesting from the topographical point of view rather than from the pictorial. There were hardly half a dozen prints which conveyed the mystery and glorious grandeur of the Alps, such as we are accustomed to see in the beautiful studies of Mr. Ballance, for instance, whose fine work is familiar to all readers of PHOTO-ERA. Far above the rest stood Will Cadby's excellent pictures, which were full of imagination. It seems to me that the pictorialist of the Alps is still to be born.

The London Salon of Photography

PHOTO-ERA had the pleasure, during July, to forward 66 prints contributed by 11 of its readers for submission to the jury of the London Salon. Entry-blanks reached the Editor so late that we were unable to announce the particulars in our August issue. We hope next year to receive notice soon enough to get together a thoroughly representative selection of pictures by our best workers.

The Boston Photo-Clan

DURING the summer a few workers interested in pictorial photography effected an informal organization with the intention to afford each other helpful criticism and thereby produce better exhibition-material. The members are: J. H. Garo, William H. Kunz, F. R. Fraprie, Dr. Malcolm Dean Miller, Dr. H. B. Shuman and Dr. C. T. Warner. Frequent meetings have been held and it is hoped to have a preliminary showing of work at the Bridgeport Convention. Later in the season a larger exhibition will be held at the Garo Studio.



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OUR ILLUSTRATIONS

Edited by WILFRED A. FRENCH

Our Illustrations

OUR front-cover illustration is by the foremost photographer of Swiss scenery, G. R. Ballance, of St. Moritz-Dorf, Switzerland, although he has added to his enormous collection of negatives many from the neighboring countries of France, Italy and Austria. The picturesque beauty of the gorge of Tivoli, near Rome, made a strong appeal to Mr. Ballance, as it has to every lover of natural beauty; but the view here presented is quite unconventional, for, whenever possible, Mr. Ballance chooses his own particular view-point.

The subject of our frontispiece is Walter M. Brackett, the well-known painter of trout. The picture is esteemed by his friends as a true and characteristic likeness. It was made several years ago, when he had reached the age of eighty-five. He declares that he is as vigorous in mind and body as he ever was. Mr. Marshall, the photographer, is one of Boston's veteran practitioners with a studio on Arlington St., overlooking the Public Gardens. Data: Light good; Voigtlaender & Son's Extra Rapid Euryscope lens; 17 1/2 inch focus; full opening; 1 1/2 second; 8 x 10 Cramer Banner X plate; glycin in tank; 8 x 10 Solio print. A superb carbon enlargement of this portrait hangs in the reception-room of the Boston Art Club.

The pictures accompanying Mr. Koch's brief article on Panama, page 114, are more in the nature of records than carefully-planned pictorial impressions.

The little pastoral scene, page 116, has just enough diffusion of focus to suggest the atmosphere peculiar to the country—Mexico. The inordinate focal length of the lens used is in a measure responsible for the fusion of the principal planes. For instance, there appears need of visual distance between the animals and the tree-trunk immediately back of them. The man's feet are dangerously near the lower edge of the picture, so that the foreground is manifestly too scant. Data: 9 A.M.; bright sun; back-combination of R. R. lens; focus, 23 inches; full opening; 1/5 second; distance about 100 feet; pyro-soda; 2 1/2 x 4 Kallitype print developed with Rochelle salts and a little borax.

"The Enchanted Mesa," page 117, is from F. I. Mønsen's large and interesting collection of Hopi-Indian photographs, a series of which was published in PHOTO-ERA for Oct. 1910. Data: 6 1/2 x 8 1/2 Century View-Camera; B. & L.-Zeiss Convertible lens; 10-inch focus; 1/25 second; Orthonon plate; pyro; tank; Solio print. For detailed description of the artist's *modus operandi*, we refer the reader and student to Mr. Mønsen's admirable article, "Picturing Indians with the Camera," printed in PHOTO-ERA, Oct. 1910.

An attractive subject by F. E. Bronson appears on page 119. Although well composed, the picture seems to demonstrate the limitations of photography in one respect. The glow of the departing light and the silhouetted forms in the landscape are well rendered, but the atmospheric feeling does not seem to have been caught. The tree at the left is too insistent, though much farther away than the group of trees at the right. This slight fault might have been rectified in the print. The figure would be more effective if it had faced the west which, in this picture, is the chief point of interest. A sitting attitude might, perhaps, have been more desirable. Data: June, 7 P.M.; quite bright; 1/25 second;

4 x 5 Cartridge Kodak; Goerz lens; F/6.8; 6-inch focus; Orthonon plate; pyro; developed in Kodak film-tank.

A frequent but thrilling moment in our great national game has been successfully depicted by T. M. Richardson, page 120. These high-speed photographs have the added value of proving the generally correct judgment of the umpire, whose decision is frequently questioned by both players and spectators. Being human, that functionary sometimes errs, and the press-photographer, with his highly-efficient camera, corroborates this also. These photographs of arrested motion often possess immense artistic value. It is charged by prejudiced painters that it is merely accidental, but the photographer, with keen artistic sense, judgment and experience, may be in a position to dispute this statement. In any event, Mr. Richardson's picture is certainly a well-balanced arrangement and is likewise a splendid technical achievement.

"Autumn-Mist," page 121, is an extremely beautiful picture. The original print, an enlargement, is a masterpiece of atmospheric perspective, the delicate tone-values being admirably interpreted. To balance a composition of this sort requires a fine sense of artistic discretion, and Mr. Long has acquitted himself like a true artist. To be frank, the reproduction does not agree with the original in the full range of delicate gradations, for the central mass and the one at the left have been too strongly emphasized by the engraver. Data: October, 6:30 A.M.; heavy mist; 5 x 7 Graphic Camera; Wollensak Single Achromatic lens; 14-inch focus; 6 seconds at F/16; pyro-metol; 9 x 11 P.M.C. bromide enlargement.

As instructor in portraiture at the Illinois College of Photography, Mr. Raymer is expected to produce prints that are models as regards posing and lighting. He believes in vigorous high-key portraiture, and the young woman at the window, as pictured on page 123, is an excellent and praiseworthy example of his method. The attitude of the model is easy and graceful, the flow of lines is spontaneous and consistent, the figure is well balanced as to line and light, and the illumination has been managed with artistic skill. The technique is obviously flawless. Data: place, living-room; 16 x 20 studio-camera; rear combination of Wollensak lens, Series A, designed for 6 1/2 x 8 1/2 plate; 12 seconds; negative made direct on 16 x 20 Cramer Banner X plate; 16 x 20 print on Artura, grade E.

No portrait among those of our pictorial contributors will be examined with greater interest than that of William Norrie, the famous marine-photographer (page 124) whose exquisite pictures of sea-craft and marine-scenery have afforded so much refined pleasure to readers of PHOTO-ERA. American camerists who have visited him at his native town, Fraserburgh, Aberdeen, on the northeast coast of Scotland, have spoken with pleasure of the courtesy and hospitality extended to them. In a personal letter to the Editor, the Scottish seascapist describes his method of capturing the dashing wave, a process requiring considerable nerve, coolness and skill. His portrait depicts him ready to dash into the breakers to secure a coveted picture.

The Parrish Sisters are admirers of the Pre-Raphaelite school of painting, and much of their work shows its influence. See page 126. In form and attitude this head is surprisingly reminiscent of Rossetti's "Beata Beatrix"; but, lacking color, the photograph is less effective.

The genre by W. A. Boger, page 127, is well named. It is a pity it could not have been included in our August symposium, for it convincingly illustrates the truism that the highest light on the human face — or any portion of the body — never equals in brightness white cotton or linen, even under direct sunlight. The values throughout this picture have been admirably maintained, and yet *no orthochromatic plate was used*. This interesting fact may upset the pet theory of some people regarding the rendering of color-values. It's a capital composition, Mr. Boger! The position of the little rascal, the surroundings, the workmanship — all are superb. Data: July, 10 A.M.; bright sunlight; 1/50 second; 4x5 Graphic Camera; B. & L. Zeiss Protar No. 7; F/6.3; 6 3/8-inch focus; stop F/8; Seed 27; pyro; 6x8 Platino Bromide enlargement through fine bolting-cloth.

The exquisite workmanship of the picture of a country road, page 131, commands admiration. The artist is a professional photographer in a small New Hampshire town, and all his work is marked by tasteful composition and technical skill. Data: October, 3 P.M.; cloudy; 5x7 Cycle Poco; B. & L. Zeiss Convertible Protar No. 9; 7 1/2-inch focus; stop F/64; 1 1/2 seconds; Standard Orthonon; pyro; 5x7 print on Artura Iris, grade B.

The landscape on page 131, also by C. Edward Powers, is a rich, well-balanced study in chiaroscuro, and conveys the atmospheric feeling of that lovely region. Data: July, 4 P.M.; 2 1/2 seconds; Ideal Ray-Fitter; apparatus and materials as in preceding picture.

A more ardent lover of nature than W. B. Davidson it were difficult to name. This is manifest in all his pictures and, particularly, in his very beautiful "Winter Sunrise," page 133. It is a New England scene; and in some parts of Massachusetts the dried-up foliage remained on the trees throughout the winter, as shown in Mr. Davidson's view. Data: February, 1911, about 8:30 A.M.; 1/25 second; pyro; 8x10 platinum print.

One of our subscribers in Southern Russia, Mr. Petrov, honored us last spring with a number of his prints, one of which appears on page 133. The landscape is typical of that region, gloom being its predominating characteristic. The picture nevertheless has a marked pictorial quality, and the receding perspective of road and country is capably portrayed. The original print is a 5x8 1/2 platinum. No other data.

The portrait of J. H. Garo, presented on page 134, illustrates the interpretive powers of Wm. H. Kunz, now installed in Boston as a professional practitioner. He is also active as a color-process expert and specialist in every technical department of the art-science. Data: July 15, 1911, 4 P.M.; 8x10 studio camera; B. & L. Portrait; F/3.5; 12-inch focus; at full opening with diffusing-device; light, bright; single slant light curtailed; 4 seconds; Wellington Anti-Screen plate; Edinol-Hydro (Kunz formula); print, Triple A Velours; complexion of subject very dark.

The cattle-piece, page 136, appeals to our sense of beauty. The arrangement of the animals is much above the average, although we cannot recall a grouping of cows that is ideal, except in a painting. Here we have at least pleasingly clear definition, a variety of movement and a picturesque setting. The illumination of the scene is most pleasing, and the separation of planes judicious. Data: July, bright light; 4x5 Poco C Camera; B. & L. R. R. lens; stop, F/16; 1/25 second; Seed plate; pyro; 5x7 platinum print from enlarged negative of original 4x5 print.

We have so frequently referred in terms of praise to Mrs. Pearce's work that no comments are necessary at present, except that the portrait on page 137 is a good

illustration of her artistic ability as a photographer of children. Mrs. Pearce is a member of the National and the Illinois Associations, the Women's Federation, The Circle and other photographic bodies. Data: 8x10 studio camera; B. & L. Extra Rapid R. R.; F/6.5; 13-inch focus; at full opening; November, 11 A.M.; good light; 1/2 second; Standard Orthonon; pyro; 8x10 Artura print.

Our Monthly Competition

The subject this month, "Decorative Flower-Studies," was fully grasped by only about twenty-five per cent of the participants, but these contributed excellent material. Thus, the picture capturing the first prize, page 140, fulfils the conditions of the contest perfectly. The design is tasteful and pleasing, and the technical demands have been successfully met. Whether the arrangement would appear less set if the position of the side-piece had been reversed is a question we have not been able to decide. Data: Central section — April, 3 P.M.; good window-light; stop, U. S. 32; 2 minutes; metol-hydro; 3x5 1/2 Velox print. Side-panels, the same, except 3-minute exposures, as it was later in the day when they were made.

The spray of Bougainvillia, page 141, lends itself well to the purpose of a modest and pleasing design. Data: March; strong light from side window; Eastman N.-C. film; Bausch & Lomb-Zeiss Tessar, Series IIb; 5 3/4-inch focus; stop F/8; 1/25 second; pyro, tank; 3x7 Wellington Bromide enlargement.

The drooping blossoms of the locust-tree (*Robinia Pseudacacia*) naturally adapt themselves to decorative treatment, although in the case of Mr. Grinleese's effort, page 142, a little more uniformity in the choice of pendants, or a careful arrangement of the entire group, together with a judicious illumination, would doubtless have yielded a more harmonious result. Data: May, 1 P.M.; window, bright light outside; Bausch & Lomb-Zeiss Tessar, Series IIb; stop F/11; 1 minute; 4-times color-screen; Orthonon plate; edinol-hydro; 8x10 enlargement of part of negative on Wellington Carbon Bromide.

The Honorable Mentions in this contest will also be found interesting. James Thomson's "Asters," page 143, form an effective panel. The arrangement is good, and the lighting has kept the petals well separated. Data: May, 1910, north light; Anachromatic lens; 5-inch focus; used at F/64; Cramer Inst. Iso.; color-screen; pyro; Artura Carbon Black print.

The picture of Giant Cosmos, by Harry D. Williar, page 143, is a strikingly-effective arrangement. The grouping is graceful and well-balanced. Excellent judgment dictated the lighting, as the flower in shadow imparts a logical support to the entire group. The technique merits high praise. Data: Window-exposure; 2 minutes; 4x5 Hammer Slow plate; Goerz lens, Series III; 6-inch focus; 5 1/2x9 enlargement on Cyko paper; metol-hydro.

The very attractive composition, page 144, is by a reader who is relatively a new-comer. Mr. Jeanne has participated in several Guild contests and the work thus far shown has been marked by true artistic temperament and good workmanship. His present flower-study is proof of this. He bids fair to capture one of the important prizes ere long. No data.

Picture-Law Is Upheld

THE Supreme Court of the United States has upheld the constitutionality of the New York statute forbidding the use of a photograph, or name of another, for trade advertising purposes, without the written permission of the subject or his guardian.

ON THE GROUND-GLASS

The Duehrkoops' Visit to Boston

ARRIVING direct from Hamburg on the S. S. *Moltke*, Rudolf Duehrkoop and his daughter, Minya Diez-Duehrkoop, paid a visit to Boston, under the guidance of Mr. Joseph DiNunzio. The first day was spent in seeing the sights and visiting prominent studios. At noon they were the guests of Wilfred A. French at the Boston Art Club at luncheon. The party comprised Mrs. Diez-Duehrkoop, her father, Rudolf Duehrkoop, Mr. and Mrs. Joseph DiNunzio, Morris Burke Parkinson, Charles A. Hoyle and Wilfred A. French. Immediately after the repast, Mr. Duehrkoop and his daughter took the train for Manchester-by-the-Sea, at the invitation of Mr. and Mrs. Charles A. Hoyle, Mr. Hoyle having a summer studio at this fashionable seaside resort. The following day these two distinguished German photographers were the guests of Mr. and Mrs. J. H. Garo, and were shown the scenic beauties of the Metropolitan Park System, which they pronounced unsurpassed by any capital in Europe. The party in this memorable automobile-trip included Mr. Herman Arnold, the Boston representative of the Eastman Kodak Company. The Duehrkoops then returned to New York, thence journeying to St. Paul, visiting *en route* several of the large Eastern cities.

Not the Fault of Photography

APROPOS of our recently-expressed hope that the portraits on British currency and postage-stamps of King George would be favorable to His Majesty, we regret, as much as the British people, that the first experiment in this direction has proved a dire failure. The postage-stamps on English letters which have come to us seem to bear not the least resemblance to the features of King George; in fact, the effigy seems to be that of an entirely different person. Anyone interested should compare this unsuccessful portrait with the very favorable and thoroughly-trustworthy likeness published in the July number of *Studio Light*, which, in spite of certain technical defects in the accessories, will doubtless never be surpassed as a portrait photograph of George V.

Curiously enough, the London papers, extremely dissatisfied with the aforesaid effigy of the present sovereign, deliberately attribute this deplorable result to photography; whereas, as everybody knows, postage-stamps are engraved by hand. They are not, as some newspapers assume, photogravures or photo-engravings. It is not even apparent that the portrait in question was copied from a photograph. It seems strange, therefore, that a suitable photographic process cannot be found which will supplant conventional hand-engraving and thus produce more satisfactory results.

Perseverance Wins

As proof of the thoroughly unprejudiced attitude of the PHOTO-ERA jury, we cite the fact that among the participants in our monthly competitions who have not yet captured a prize are many personal friends of the editor. A prominent pictorialist of Wisconsin contributed regularly to the PHOTO-ERA monthly contests for nearly two years before he got a prize. The winner of the third prize in a recent competition writes:

"Dear Sir:—This honor means much to me, as I have been trying for over four years for it and have several times succeeded in winning honorable mention."

Obituary — George G. Rockwood

GEORGE GARDNER ROCKWOOD, a respected member of the old guard, passed away July 10, 1911, just after the August issue had gone to press. As a cotemporary of Napoleon Sarony, he was on the top wave of success and prosperity; but while the dashing Frenchman was winning fame as a photographer of members of the dramatic profession, Mr. Rockwood portrayed the noble rich. He knew his business thoroughly, and was not afraid to challenge the portrait-painter to produce a better portrait with the brush and palette than he could with the camera. He was a caustic and forceful writer on the limitations of the brush as compared to those of the camera used to express human character. His last tilt was with William M. Chase, and, as usual, he emerged triumphant. He was also scrupulously honest in affairs of business. He told the editor, at the last meeting of the P. P. S. of New York, that during his career he had photographed over 325,000 persons including Gen. Winfield Scott, Horace Greeley, N. P. Willis, Edgar Allan Poe, Martin Van Buren, Ole Bull, Louis Gottschalk and Jenny Lind. The first carte-de-visite made in this country is attributed to Mr. Rockwood, Baron Nathan Rothschild being the sitter. In 1837 he moved from St. Louis to New York, where he became eminently successful. Many valuable improvements in photographic apparatus and technical methods are ascribed to him, and these he cheerfully explained in his contributions to the photographic press.

They Fail to Receive Photo-Era

PHOTO-ERA's equivalent to the Federal Dead Letter Office is a receptacle containing communications from persons who have neglected to append their names or addresses. It is hoped that this notice may be read by those disappointed persons who, doubtless, have wondered why their letters have been utterly ignored. This collection of unsigned epistles and post-cards contains also several requests for advertising-rates. As it is impossible to reply to these, the impression may go forth that PHOTO-ERA is ultra-exclusive in its selection of advertisements. While this is true, we have always room for more advertisements of the right kind. Let those who have carelessly sent us letters with incomplete addresses please drop us a postal and we shall be only too glad to reply promptly and adequately.

A Wise Counselor

A PROMINENT American daily newspaper, eager to impart photographic knowledge to its readers, has secured the services of an English expert soon to become famous for what he does *not* know about the art. He appears to be quite unknown to the craft, either in this country or abroad, and yet he writes glibly and earnestly, but rarely with intelligence. Here are a few specimens selected from his latest contribution, "Film and Slide Compete."

"With the roll film camera fitted with slides, the tripod can be used with the greatest advantage."

"The architectural photographer must be a student of architecture."

"A photograph of a landscape is the representation of a personal impression rather than of actual facts or realities; hence a picture is nature idealized. . . . Purchase as good a lens as you can possibly afford, because after all, everything depends upon the lens."

Alc. J. Braid.

NOTES AND NEWS

Announcements and Reports of Club and Association Meetings, Exhibitions and Conventions
are solicited for publication



Bridgeport Convention of New England Association Assumes National Importance

ALL RESTRICTIONS WITHDRAWN FROM PICTURE-EXHIBITION AND GREAT DISPLAY IS PROMISED—DEMONSTRATION-TENT FOR NEW GOODS AND PROCESSES A NOVEL FEATURE—INVENTORS TO SHOW NEW DEVICES—ATTENDANCE PROMISES TO BREAK ALL RECORDS—PRESIDENT GARO APPOINTS STAFF OF HONORARY VICE-PRESIDENTS WHICH INCLUDES MANY FAMOUS NAMES.

THE change of plans for the New England Convention which gives us the Crystal Palace on Steeplechase Island for an art-building makes it possible to extend to the photographers of the United States an invitation to put their work on view side by side with the work of hundreds of other photographers from all over the country, professional and amateur.

In former years there has always been the fear that too many pictures would be sent by individual photographers or that the space at the disposal of the Association was too small, and in consequence restrictions have been made which frequently prevented members from displaying a full and comprehensive collection of photographs. This year the convention extends to all of its members and to photographers generally an invitation to present a display which will fully represent their best endeavors.

Every picture sent to the convention will be hung if the man who sends it says that the collection represents the best photographic work he can do. All other restrictions have been withdrawn, and it remains for the photographers of New England and the adjacent territory to co-operate with us in making a display of photographs which has never been equaled on the continent. Ample arrangements have been made to display the collection of "one man" exhibits which have been promised President Garo by the leaders of photography in every state, so that the members and exhibitors need have no hesitancy in making their exhibit completely representative of the things which they are doing in every department of their work.

President Garo believes that the greatest educational feature of a photographic convention lies in the exhibition of photographs, and for this reason alone the bars have been let down.

The attendance at the New England Convention this year will be greater than at any prior meeting of the Association, and it is the special desire of President Garo that every exhibitor at the Convention be present in person so that a just comparison can be made between the work of the exhibitor and that of his fellow-workers.

To assist the individual photographer in securing advice and instruction, President Garo has appointed the following board of honorary Vice-Presidents:

B. Frank Moore, Cleveland, O.; C. L. Lewis, Toledo, O.; Geo. G. Holloway, Terre Haute, Ind.; Clarence Hayes, Detroit, Mich.; F. Scott Clark, Detroit, Mich.; M. H. Steffens, Chicago, Ill.; S. L. Stein, Milwaukee, Wis.; J. C. Strauss, St. Louis, Mo.; E. E. Doty, Battle Creek, Mich.; Ryland W. Phillips, Philadelphia, Pa.; E. Goldensky, Philadelphia, Pa.; Wm. Shewell Ellis, Philadelphia, Pa.; Wm. H. Rau, Philadelphia, Pa.; Pirie MacDonald, New York, N. Y.; B. J. Falk, New York, N. Y.; E. B. Core, New York, N. Y.; Dudley Hoyt, New York, N. Y.; A. F. Bradley, New York, N. Y.; Oliver Lippincott, New York, N. Y.; Col. Theo. Marceau, New York, N. Y.; I. Buxbaum, Brooklyn, N. Y.; Geo. W. Harris, Washington, D. C.; Manley W. Tyree, Raleigh, N. C.; Chester Bushong, Worcester, Mass.; H. J. Seeley, Bridgeport, Conn.; H. A. Bliss, Buffalo, N. Y.; J. E. Mock, Rochester, N. Y.; A. T. Proctor, Huntington, W. Va.; F. A. Rinehart, Omaha, Neb.; F. R. Barrows, Medford, Mass.

These appointees constitute an Honorary Advisory-Board of the Association and will be on hand to give to the members the benefit of their experience and advice.

Pictures may be sent at once to Vice-President J. P. Hale, Bridgeport, Conn., and will be promptly acknowledged upon their arrival.

A great tent is to be erected on the Exposition-grounds and devoted entirely to demonstrations by the various manufacturers represented. Ample opportunity is to be given every manufacturer of photographic material to demonstrate new and improved processes for the making of photographs.

Mr. Charles S. Cochran, Bridgeport, Conn., has been appointed to complete arrangements for the demonstrations, and manufacturers desiring to reserve time for the exploitation of new goods and methods should at once communicate with Mr. Cochran, giving full details of the work it is desired to give, together with the name or names of the demonstrators.

To encourage invention the Executive Board has arranged for the free display of any new and novel device of interest to photographers. Only two rules have been made to cover this new and interesting feature: (1) The exhibitor shall become a member of the Association; (2) The device or process shall not be actually upon the market as a manufactured product.

The object of this separate and distinct exhibition is primarily to bring the photographic inventors directly into touch with manufacturers. Bridgeport is a great manufacturing-center and offers splendid opportunities for the promotion of new business-enterprises. Mr. H. J. Seeley, President of the Photographers' Club of Bridgeport, Conn., is in charge of arrangements for the Inventors' Exposition.

Secretary George H. Hastings is anxious to deliver the 1911 buttons to the members prior to the assembly of the convention; and, as there will be a great crush on the morning of the opening, members are urged to send in their dues at once.

The button this year is unique. It bears the signature of President Garo and is handsomely embossed in gold and red enamel.

DUES

New Members (Employers), membership dues.....	\$2.00 2.00
Old Members (Employers), dues.....	2.00
Employees — No membership — yearly dues.....	1.00
Associate Members (Manufacturers, dealers and photographers residing outside of the New England States and Maritime Provinces), dues.....	2.00

Remit above amounts to George H. Hastings, Sec. P. A. of N. E., Haverhill, Mass.

The railroad association has granted a rate of a fare and three-fifths to all attending the convention, upon the certificate plan. You pay full fare at your starting-point, and insist upon a certificate from the ticket-agent, which is to be DEPOSITED WITH THE SECRETARY UPON YOUR ARRIVAL AT THE HALL, and when signed by him and the passenger-agent, who will be in attendance Wednesday and Thursday, will allow you to get a return-ticket for three-fifths regular fare. A fee of 25 cents has to be paid to the passenger-agent upon his endorsing your ticket at the hall. The certificate plan applies to any railroad fare costing 75 cents or more for a single ticket to Bridgeport. Attend to this a day or two before starting on your trip.

The Saint Paul Convention

Reported by Felix Rayer

THE delegates from all parts of the United States were trooping in all day Monday, July 24; but the first official feature was the reception by the officers of the Association in the Palm-room at the Hotel St. Paul at 8.30 p.m. This reception was a successful "ice-breaker" and "hand-shaker," and brought the members into close friendly relations with one another.

Tuesday morning, at 10.30 sharp, the convention was opened by President Geo. W. Harris, in his usual business-like way, and the promptness shown in the despatch of routine business was a source of much favorable comment by those present.

Great sympathy was felt and expressed at the news of the illness of Juan C. Abel, editor of *Abel's Photographic Weekly*, a circumstance which prevented his attendance at the convention as well as the publication of his daily bulletin — a feature at the National Conventions for several years past.

At this meeting, among other things, President Harris suggested the advisability of dividing the states of the Union into two sections, to be known as the Eastern Section and the Western Section, one of the advantages claimed for so doing being the ease with which a place of meeting can be chosen; his idea being to meet in the sections alternately. This suggestion was bitterly fought by those who favored Kansas City for the next place of meeting. However, after considerable discussion, the suggestion was adopted at a subsequent meeting.

The star feature of this meeting was a lecture at 11.30 by G. L. Morrill, pastor of People's Church, St. Paul, the subject being "Snapshots." He is a very brilliant and effective speaker, enthusiastic, spontaneous, witty and, above all, perfectly collected. His eulogy of photography from the time of Daguerre up to that of Duehrkoop was very effective and original. Just as he reached this point someone of an enthusiastic nature and patriotic temperament pushed forward over the head of Herr Duehrkoop — who, together with his charming daughter, was seated on the stage — an immense American flag. The audience broke into applause. Appreciating the situation and without a moment's hesitation, Mr. Morrill entered upon one of the most brilliant flights of oratory in eulogy of Old Glory it has been the pleasure of the writer to hear. At its climax Herr and Frau Duehrkoop sprang to their feet and saluted the flag with enthusiasm, at which the entire audience as one man rose to its feet with cheers and waving of handkerchiefs and hats — verily a very impressive scene for one who respects his country and its flag as he should.

At 2 p.m. Herr Duehrkoop and his daughter took charge of the school of instruction. They were assisted each day by the demonstrators for the respective plate-manufacturers. They used a different make of plate in each of their demonstrations; and the demonstrators for the particular plate which was being used assisted. Mr. Duehrkoop selected his subjects from among his audience, and his "handling" of the subject was very unique. In fact, he scarcely touched him at all, his idea being to catch him in a characteristic attitude. He explained to his audience that his work at home consisted of visiting the homes of his clientele and using the draperies and accessories found therein, and of course they being so much more elaborate and richer, he could get better results than in the convention-hall. His source of illumination was a small window in the hall, and although there were many windows open in the hall, they did not interfere with his work. Frau Duehrkoop looked after the placing of the camera for point of view, arranging of background, etc., while Herr Duehrkoop talked to the audience, and attended to getting the proper expression from his subject.

Duehrkoopisms

"You American photographers try to make your subjects look too much like dukes, duchesses, kings and queens; you do not get the simple life of the lower people," said the father.

"The American ladies are beautiful — beautiful, and so kind; and have such slender, trim, graceful figures! I love them. The men? Oh, yes; they are handsome, but look so tired, as if they had worked too hard," said the daughter.

"The American photographer has an exaggerated idea of the worked-in-background, making it too strong and overdone. It should be very much modified and simplified," said the father.

"To be successful in photography, a woman must love it, and see more than the price of the picture in hand. She must be willing to work hard, study harder, and think hardest," said the daughter.

"To throw a picture out of focus does not, of itself, make it an artistic production; some pictures that are out of focus are abominations," said the father.

Lecture by Wm. H. Rau

One of the most interesting features of the convention was the lecture by Wm. H. Rau, of Philadelphia, on commercial photography and its possibilities. Mr. Rau says he will soon be sailing around up among the twinkling little stars, making pictures from an airship. His

suggestions, made along the lines of his subject, were listened to with the closest attention by all present.

Illustrated Lecture by Rudolf Duehrkoop

On the evening of July 26, Herr Duehrkoop gave an illustrated lecture showing slides taken from some of his pictures. This lecture was among the very best things done by the famous photographer and was enjoyed by all. The slides used were very fine indeed, and showed his famous productions to good advantage.

Lecture by Nina Spaulding Stevens

On Thursday, at 11.30 A.M., Nina Spaulding Stevens, of Toledo, Ohio, delivered a very fine lecture on the subject, "The Relation of Photography to Painting." The criticisms and comments brought out in the course of this lecture were very instructive, and the audience seemed to be in perfect harmony with the speaker, judging from the applause that was given her from time to time.

Lecture by Leslie W. Miller

Possibly one of the most instructive features to the would-be *photographic artist* was the masterful lecture by Leslie Miller, of Philadelphia, principal of the Pennsylvania Museum and School of Industrial Arts, which was accompanied with lantern-slides from "noted paintings by noted painters." Mr. Miller's answer to the question, "What is Art?" was a masterpiece, and should receive a place among the classics. He showed in what respects the oil-painter, the draughtsman, the musician, the actor, the poet and the photographer were all *artists* if they understood those things that go to make art. Said he, "Do your things in your own way, and don't try to do them the other fellow's way. Photographers are making many things that are positively unspeakable, for the reason that they are trying to imitate the painter."

Election of Officers

The election of officers resulted in the unanimous choice of Ben Larrimer for president; Chas. F. Townsend, first vice-president; Will H. Towles, second vice-president; Manley W. Tyree, secretary; and L. A. Dozer, treasurer.

President Harris, upon retiring from office, was presented with a very beautiful cup, "Pop" Core making the presentation-speech in his usual happy style.

The Next Convention at Philadelphia

The selection of the next place of meeting brought out a lively discussion with much yelling, stamping and howling; but after the dust had cleared, the thunder had rolled away and the atmosphere had become purified, it was found that Philadelphia had been declared by the president to be the next place of meeting. Atlanta, Georgia, wanted it badly, and was on hand with a stormy delegation and a brass band playing "Dixie" and other Southern airs, that caused the Southern boys to "whoop her up" in good old political fashion for a while. In fact, for a time we were confused and thought it was a democratic caucus we had bumped into. Many felt that Atlanta should have received the honor because the South has not been so favored for a great many years. However, most of the boys from the "Sunny South" say they will be at Philadelphia with a cheery word for all.

The Women's Federation

THE women made a better showing by far than even the most sanguine had anticipated. They added several new and original features to the regular program, as

well as holding business-meetings of their own. One of the best and most-appreciated features of the convention was the lecture of Nina Spaulding Stevens, of Toledo, Ohio. The criticisms of pictures made by the lecturer were certainly delivered with telling effect, and not in the usual style at all. This lecture should have been heard by every member of the association.

The new officers are: Katherine Jamieson, president; Mrs. L. M. McDaniel, first vice-president; Mabel Cox Surdam, second vice-president; Maybelle Goodlander, secretary and treasurer.

Rudolf Duehrkoop is Resourceful

WHEN one of the prominent photographers refused to pose for Herr Duehrkoop, he whirled the camera around and got him where he was sitting in the audience. Therefore, when Treasurer A. L. Dozer was requested by the celebrated German photographer to sit, he calmly walked to the executioner's chair.

The Fate of the Academy

It is, perhaps, not too much to say that the eyes of the entire photographic world were focused on the St. Paul convention with reference to its action on the academy-project. Contrary to general expectation, it was disposed of in a few minutes' time, as shown by the stenographer's report of the convention.

President: The next on our program will be the report of the academy-committee, by Mr. Lewis. This academy-committee was appointed last year to carry out the suggestions laid down by us. Mr. Lewis reported:— To the President and Members of the 1911 Convention:

Gentlemen: Your committee of ten, appointed for the selection of names for the formation of the proposed academy, begs to report as follows:

Since appearing before you shortly after our appointment at Milwaukee with a report of progress only, the committee held a meeting in January last in Chicago, at which time a careful consideration of names was made and the chairman instructed to ascertain what number of those considered would accept such a responsibility.

The replies subsequently received proved there were not enough among the eligibles who were willing to serve to make possible ultimate success.

The result, therefore, in the minds of your committee, points to the fact that the academy-project is not looked upon with sufficient favor to warrant further consideration.

We, therefore, urgently request that with the acceptance and adoption of this report the committee be discharged.

Respectfully submitted,

C. L. Lewis,

Chairman.

Mr. White (New York): I move the adoption of the report as read, and that the committee be discharged.

Mr. Medlar: I second it.

Motion carried.

President: The motion is carried and the committee discharged. [There was no further comment and the work of the convention proceeded in its usual manner.]

The Association Annual

THIS year's *Association Annual*, although not reaching the high standard of general excellence of the 1910 edition, is an imposing publication. The format is 9 x 12 inches. The text contains admirable articles as follows: A Critical Discussion of the Modern Movement in Portraiture, by Cosmos, art-critic; Seeing Things Correctly—A Lesson on the Judging of Color-Values, by William J. Edmondson, artist; Some Questions of Law—Of Interest to Photographic Practitioners, by Fredk. C.

Handy, attorney-at-law; The Correct Use of Stationery to Gain Character and Express Individuality, by George L. Fichtner, illustrator and designer; The Women's Federation of the P. A. of A., by Mary Carnell, president W. F. of P. A. of A.; The Third Annual Congress of Photography, by Ben Larrimer, first vice-president P. A. of A.

The illustrations are full-page halftones of carefully-selected portraits by capable photographers, most of whom have not been represented in the *Association Annual* hitherto. They are from the following studios: Clarence M. Hayes & Co., Detroit, Mich.; Sweet Brothers, Minneapolis, Minn.; Benjamin Studio, Cincinnati, Ohio; H. Hoffman, Philadelphia, Pa.; N. A. Brock, Asheville, N. C.; Alfred Cox, Chicago, Ill.; A. F. Bradley, New York City; Wm. H. Towles, Washington, D. C.; Chas. L. Peck, Buffalo, N. Y.; H. H. Pierce, Boston, Mass.; B. C. Golling, St. Paul, Minn.; Chas. Wallinger, Chicago, Ill.; Koshiba, New York City; Gerhardt Sisters, St. Louis, Mo.; Bessie L. Meiser, Richmond, Ind.; F. J. Feldman, El Paso, Texas; H. Schervae, Worcester, Mass., and Rudolf Duehrkoop, of Berlin and Hamburg, Germany.

The magnificent volume concludes with the Constitution of the P. A. of A. and a list of active and associate members.

Mr. Stein and the Copyright League

At one of the meetings of the congress, Mr. Stein gave the following instance of the benefit of belonging to the copyright league:—

"Some of you, maybe, never use a copyright, but if you have occasion once in a while to get somebody of prominence that the magazines or newspapers want, they will pay you any sum for the publication of that picture. They have got to have it, and when they don't pay for it you have the easiest thing in the world. If they go to work and ignore your copyright and publish your picture, you send down to New York to the president and tell him all about it, that the copyright has been infringed by so-and-so, and they at once take hold of the matter. They have an attorney who is versed in such cases, and he will take it off your hands. . . . Inside of no time he brings these parties to time and they pay whatever is called for. There is no 'settlement' made. Only recently I had trouble with 'The Ladies' Home Journal,' which copied one of my pictures. Seven days from the time I sent in my matter the thing had been settled. They paid the whole price, lacking 25% for their work, and I got 75% out of the proceeds. So that one instance only will pay for many years' dues, which is just a nominal sum. I recovered \$250. Originally, they could have had the picture for a small sum, if they had asked for it."

The Picture-Exhibit

THE exhibit of pictures this year was particularly good, and one thing noticeable, above all, was the uniformity of results, indicating that there is a gradual improvement going on all along the line. Out of the total number of entries, which was 1602, the low-toned pictures were largely in excess of the others. The pictorial quality, showing proper regard for concentration and subordination, was much better than in former years. The tendency, as indicated by the exhibits, seems to be more towards half-lengths, very few full-lengths and busts being shown. Where busts were shown, the heads were very large; in fact, to our way of thinking they were much too large for beauty, sometimes suggesting distortion. Worked-in grounds were very much in evidence, so much so, at times, that one wondered whether it was a landscape or a fire on the horizon of the picture. This feature of the work was

spoken of by Professor Miller, of Philadelphia, in his lecture, and some of it was pronounced "rotten" by him. On the other hand, there were many pictures shown which had beyond all question been much improved by eliminating so much broad, flat space, as represented by the ground, by introducing a little relief.

Several of the states made exhibits, which included some of their most active workers in their state associations. The Iowa exhibit contained seventeen well-known names, and all work from this state was far ahead of the average. The Iowa boys have been doing some hard work in their association for several years past, having every year some well-known authority from outside of their state to deliver a series of lectures and demonstrations on different branches of the business, and their work shows a big stride forward.

In the Ohio exhibit there were fourteen entrants, and among their number were several whose names are known to every photographer all over the country, and a few whose names are known as past-presidents of the National Association.

Wisconsin had the largest state exhibit, reaching up to twenty-five entrants, and, as is always the case with the exhibitors from Wisconsin, their work stood right up in the front rank and was the center of a crowd all the time the hall was open.

The Kansas exhibit of eighteen was of special interest to the writer, for to his mind it showed the greatest improvement made by any state, extending back for a period of seven or eight years. At that time, and for four or five succeeding years, we were engaged to judge their state exhibit, and every year it was our pleasure to note the steady advancement of the Kansas boys up to the St. Paul convention, and now we say, "Good for the Kansas photographers! They have arrived."

The Illinois exhibit was represented by nine; not so large as to numbers, but all good. There was but one Chicago man in this exhibit. We cannot understand why, for it would naturally seem the proper thing for Chicago to take the lead.

The Northwestern exhibit had seven, and, with one or two exceptions, they were up to the standard and showed quite an improvement over former years.

The Daguerre Memorial Exhibit, however, was the center of attraction, containing as it did twenty-two names, whose pictures are admired by almost every nation. In this collection we saw pictures that have won recognition wherever shown and, when in competition for honors, have taken all prizes in sight. The exhibitors were: Doty, Hauser, Hubert Brothers, Sykes, Brubaker, Core, Harris & Ewing, Steffens, Littleton, Wallinger, Moore, Venard, Hirschberg, Buckley, Gilbert, Jaushrud, Sabin, Towles, Thuss Brothers, Johnson and Boversox.

But the exhibit which, no doubt, attracted more interest than any other was that of the Women's Federation, which was far ahead of their Milwaukee exhibit, both as to numbers and excellence. There were seventy-five prints in all, and of a great variety, showing wonderful individuality. In fact, the commonplace was less in evidence in this collection of pictures than in any other exhibit. More attention seems to have been given to the pictorial qualities, and not so much to the technical. Home-portraiture was largely shown, and the homelike atmosphere was seen and, above all, felt. In some cases the extreme softness of focus might have received severe criticism from the admirers of microscopically-sharp pictures, but the *motif*, when once grasped, offset that quality. As stated, there were seventy-five pictures, no two which could by any means be called the same in effect. The individual traits were more in evidence than the following of stereotyped lines.

There were special exhibits made by the Libby Art Studio, The Photo-Secession, E. S. Curtis, Frederick I. Mosen, Sweet Brothers and the Duehrkoops.

The Congress of Photography

THE Third Congress of Photography, Chairman Ben Larrimer, appointed Charles L. Lewis and George W. Harris as credentials-committee, and upon rollcall the following delegates and alternates responded:

Carl Ackermann, New England; Messrs. Rau, Golden-sky and Harris, Pennsylvania; Messrs. Pratt, Tennyson and Medlar, Illinois; Messrs. Holloway and Swartz, Indiana; Messrs. Ferguson, Ruver and Voillan, Iowa; Messrs. Harden and Murphy, Kansas; Mr. E. E. Doty, Michigan; Messrs. Egan and Butter, Minnesota; Miss Reinecke and Mr. L. J. Studebaker, Missouri; Messrs. Soper and Leachiskey, Nebraska; Messrs. Hunt & Hollinger, Virginia and the Carolinas; Mr. Charles L. Lewis, Ohio; Mr. E. F. Smith, California; Mr. F. W. Voorhees, Texas; Messrs. Guttenstein and Claus, Wisconsin. The congress adopted the suggestion made by President Harris to draw an imaginary line extending north and south, for the purpose of holding meetings alternately in the East and the West, and so recommended it to the P. A. of A. The dividing-line as suggested by Mr. Harris is to run up the Mississippi River to the Ohio, and on the Ohio, to the Indiana line, over the Indiana line to Lake Erie. Charles L. Lewis was designated as the one best qualified to present this measure as a constitutional amendment to the photographers' association.

A committee was appointed to draft a measure providing for the standardizing of our state and interstate exhibitions. Their report was adopted, the main feature of which was the duties of judges, which is to the effect that all exhibits shall be judged before being exhibited.

How Duehrkoop Lost His "Roll"

GREAT excitement was caused at one of the meetings of the convention when Herr Duehrkoop, suddenly jumping to his feet, shouted that he had been robbed of a "roll" containing about twelve hundred dollars. Instantly all was confusion, and a hurry-call was sent out for the valorous police of Saint Paul, who responded in force and began an investigation after the most approved methods of the distinguished Sherlock Holmes. Very shortly it was found in the automobile in which he had come to the hall, wedged in between the cushion and the side of the seat.

With the Manufacturers and Dealers

ABEL'S Publications were represented by Miss Edith Madison, and had desk-space. Mr. Abel was unable to be present.

Anso Company — T. W. Stevens, president; A. C. Lamoutte, vice-president; C. Stanbury, 2d vice-president; Geo. W. Topliff, T. C. Muller, Frank Leach, E. Van Gilder, Harry Walters, W. P. Etchison, C. E. King, S. D. Owings, A. J. Rosemeyer, Murray Brown, J. A. Dick and Chas. Anthony — presented a very handsome exhibit of their celebrated Cyko papers of all grades, and called special attention to their latest offering, a new linen stock, which yields one of the most attractive surfaces imaginable. This exhibit filled one entire room, which was just to the left of the stairway leading to the exhibition-rooms. Their "Key to Success" was very popular as a souvenir.

The Artex Photo-Paper Company, Columbus, Ohio — W. A. Sanford, secretary and treasurer — displayed its paper in one grade (slow-printing) and five surfaces. It is made to suit all negatives. The surfaces are known as the A, B, C, D and E grades. The fine exhibit of prints

on the papers of this new and enterprising firm furnished ample evidence of extremely high quality.

The Bausch & Lomb Optical Company, in charge of E. A. Taylor and R. E. Merville, displayed a varied assortment of prisms, binoculars, lenses, and also demonstrated the Opaque Balopticon used by Herr Duehrkoop in his lecture. There was also a complete line of Volute and Compound shutters. The firm gave out as souvenirs a handsome portrait of President Harris, by W. H. Towles, of Washington, D. C., and "*Will They Bite?*" a perfect gem of child-photography, by Belle Johnson, of Monroe City, Missouri.

Berlin Aniline Works, New York, in charge of the company's well-known and popular head of the Photographic Department, George L. Barrows, presented their full line of the justly renowned Agfa chemicals, effectively and tastefully displayed, which recommend themselves, as they have already won a place in many leading studios of both hemispheres.

Blodgett Photo-Machine Co., Hicksville, Ohio — C. A. Blodgett, president — displayed a printing-machine which was shown at the Michigan and the Ohio conventions, winning the cash-prize in 1909. It is now much improved, and is guaranteed not to become overheated while in use.

The Bridges Mfg. Co., in charge of Alfred A. Twitt, had the space just to the left of the main entrance, and their booth was very attractive indeed. In it were shown many new and original designs, together with prints mounted solid, tipped and in folders. A new catalog was distributed.

Burke & James, Chicago — Geo. W. Mackness and Joseph Normau — made a feature of a new portable background-carrier for home-portraiture. The Improved Rapid Printer, Ingento Convertible Poser (which is a very ornamental posing-chair, which in an instant's time can be converted into an equally handsome child's chair), New Improved Style D reversible developing-tank, holding twelve and twenty-four plates, Lockjoint Moulding, Ideal and Ingento Enlarging-Lanterns for photographers, and an exhibit of imported and domestic pictures were also exhibited.

The Central Dry-Plate Company, St. Louis, is a new claimant for photographic honors. It was represented by Lou. F. Morris, general manager; F. M. Whipple, manager of Chicago branch; E. A. Atwater, Geo. Bassett and H. A. Peterman. The exhibit consisted of an octagon-shaped frame filled with negatives made on Central Plates, made visible by electric lights, also many prints from their plates, which showed remarkable brilliance and softness combined. Their souvenir was a large paper-weight in the form of a button with a mirror on the back.

A. M. Collins Mfg. Co. — H. A. Stone, sales-manager; J. T. Fenner, advertising-manager; J. A. Hood and Fred Godfrey — exhibited their up-to-date line of mountings. Souvenir, a "flip-flop card" that took every one by surprise when it flopped.

The G. Cramer Dry-Plate Company — G. Cramer (Papa), Mrs. G. Cramer, assisted by Messrs. Milentz, Wallace, Hart, Dorella, Emil Cramer, Morgan, Webber, Beatty, Brown and Cornack — made a handsome exhibit of negatives, which, by an ingenious arrangement of electric lights, could be seen at all times; also prints from some of the leading studios of the world. The booth was decorated in green and white, and had floral decorations of palms, bay-trees, etc. It was a haven of rest to many who had become weary from constant sight-seeing. The souvenir was a vest-pocket pencil and retainer.

The Defender Photo-Supply Company — Frank Wilnot, president; R. W. Palmer, advertising-manager; Henry Vroom, manager of St. Louis office; R. D. Seeley,

manager of Minneapolis office; O. C. Busch, manager of Chicago office, and C. H. Stauntou—showed prints on its Triple A Velours paper, in black and white. Buffs and sepias made with the new hypo-bath process, and a collection of exquisite prints from the new Defender Ortho. and Defender D.-C. Ortho. were also shown.

W. J. Dyer & Bro., St. Paul, Minn., was represented by F. H. Phillips, who demonstrated the use of their film-grounds for "worked-in effects." These are sketches on film, and are to be placed in front of the negative during printing. There are twelve designs, and many combinations may be obtained.

The Eastman School occupied the room on the right of the main stairway entering the main hall, and was in charge of Mr. Frank Hazlett, Mr. Don Scott and Mr. Milton Waide. A regular program was followed each day and was adhered to with clock-like regularity. Instruction and demonstrations were given in lighting and posing; tank- and tray-developing; draping the model; printing developing-papers, such as Artura and Azo; Colloidio-Carbon and Platinum paper. Demonstrations of New Seed 30 Plate were also given. The informal talks and answering of questions by the gentlemen conducting this school made it a mine of practical information. These schools are being held in all of the large cities in the United States and have proved of the greatest benefit to photographers everywhere.

The Eastman Kodak Company's magnificent exhibit extended across the entire length of dealers' hall facing the entrance and was under the direct charge of Messrs. Harry M. Fell; C. T. Ames, sales-manager; Frank Noble, secretary and treasurer; J. B. Guthrie of the plate division; A. H. Paul; H. H. Tozier; M. A. Yauck; L. B. Jones; J. Di Nunzio; C. W. Burley; H. F. Hoeft; S. B. Hood; C. L. Swingle; C. H. Ruffner and A. C. Brace. Representing the different papers of the Eastman Kodak Company were: E. J. Arthur; W. H. Shultz; H. E. Niles; S. T. Rydall; C. C. Denton; S. J. Fallert; John Zarley; Harry Smith; S. A. Anderson; C. F. Krauss, M. L. Ferris; F. Edw. Penney; E. W. Countryman; A. H. Parsons and S. L. Andrews.

Representing the plate divisions were: W. J. Stuber; N. P. Richardson; C. G. Stearns; O. J. Smith; W. P. Wentz; A. W. Allen; S. D. Goff; A. R. Thompson; W. F. Baker and C. L. Bonton.

This exhibit was undoubtedly the handsomest ever made by the company, and consisted of prints on platinum, developing- and printing-out-papers in black and white and sepia tones. The collection of prints was taken from negatives made by some of the best operators known. Each paper was allotted a space to itself, and all were arranged in a most effective manner.

The department of Eastman Professional Materials was represented by the Century Camera Company and the Folmer & Schwing Company, which had adjoining booths, and was in charge of Paul Favour, H. F. Hoeft, Thos. Griffin and H. C. Fincke. The exhibit consisted of cameras, stands, screens, lenses, and, in fact, all goods that are made by these two well-known divisions. They also showed several photographic enlargements, which attracted a great deal of attention.

Carl Ernst & Co., New York and Berlin, was represented by Chas. H. Kirschner and Henry Schmidt, manager. They displayed photo-manners, photo- and souvenir-albums in a very tasteful manner.

C. P. Goerz American Optical Company, New York, Fred Schmid in charge. Lenses, folding-cameras, shutters, binoculars and photographs made by Garo, Ellis, Bradley, Goldensky, Rau and other eminent practitioners; also a working-chart showing the making of a Goerz lens in all stages. A celluloid foot-rule was passed out as

a souvenir. Burke & James of Chicago are agents for the Middle West for this well-known lens.

The Haloid Company, Rochester, N. Y.—H. H. Reich-enbach, secretary, and C. H. Gaws—exhibited and explained the modus operandi of their Seven Extra Surfaces of paper, particularly their grades C, D and E, and the methods for getting Sepia Tones. Their reading-matter tells all about it.

The Hammer Dry-Plate Company—L. F. Hammer, Jr.; Cliff Reckling; Nate Corning; C. O. Towles; Geo. M. Eppert; C. W. Taylor, and M. E. Norton—made an extensive and elaborate display of pictures taken from negatives made on their plates by many well-known leaders in the profession. More than seventy different studios were represented in the exhibit, including Geo. Edmondston, Garo, Ellis, Doty, Hollinger, Mary Carnell, Stevenson, Bradley, Towles, Gerhardt Sisters and many others. Their little yellow hammer was much sought after as a souvenir.

The McIntire Photo-Supply Company, South Bend, Ind.—H. H. McIntire, wife and daughter—demonstrating their truly wonderful system of securing any tone from black and white to the warmest of sepias by accurate exposure and development, using their Ueatone papers, developers and printing-machine. Demonstrations were given at all times during the day.

The Magnet Photo-Materials Company, Boston, Mass., Charles O. Lovell. Prints from their four grades of plates, which are made in two speeds, were on show. Their prints stand as a record for the good qualities of their plates.

E. B. Meyrowitz, New York, in charge of H. M. Bennett, showed Carl Zeiss (Jena) Lenses. They made a specialty of photographing the prominent members of the convention, in snap-shot work, enlarging up to 11 x 14 and hanging the enlarged prints in their booth. This booth was the center of attraction the whole week. The enlargements were known as Tessarographs, named after the lens with which they were made.

Geo. Murphy, Inc., New York, had desk-room and was represented by Mr. Murphy himself, who exploited the Royal Foreground Ray-Screen, Quick-Set Metal Tripod, Improved King Light Controller, Ross lenses and Autotype Carbon-Tissues. Though a veteran in the photographic trade, Mr. Murphy is still a "live wire."

The Northern Photo-Supply Company—H. E. Hugdahl and Miss Marion First—showed card-mounts, cameras, lenses, printing-frames, flash-machines and a general line of photographic stock. Everyone who visited them got snakes—not in his boots, but in an imitation camera. When the button was pressed his snakeship jumped out, and he was a galawopper, too. Quite the hit of the convention as a souvenir.

The Northwestern Stamp-Works, in charge of E. D. Fales, had desk- and table-room, showing stamps and embossers of new design. Their latest offering is a colored embosser, making a very attractive card- or paper-embosser.

Newcomb-Macklin Company, Chicago, E. J. Brozeau, had a full line of up-to-date frames (hand-carved) and many original designs—a very attractive exhibit.

Peck & Co., Minneapolis, Minn.—C. R. Wunderlich, C. E. Anderson, and H. N. Fairchild—a most astounding line of baby-charmers, lenses and card-stock.

The Photo-Autopress, Minneapolis, Minn.—C. F. Potter, Jr. and Glen M. Dye—occupied the booth reserved for the G. M. Dye Printing-Machine Company, manufacturers of a most elaborate printing-machine, capable of automatic fixed contact and uniform exposures. The Photo-Autopress for large orders of post-cards was a show within itself, possessing in addition to the features above mentioned that of racking the cards

automatically after exposure—the rack afterwards serving as a tank for developing, fixing and washing.

Presto Mfg. Co., Pittsburg, Pa., S. S. Loeb, demonstrated the use of their infallible tinting-masks.

Quaker City Card Company, Philadelphia—Geo. H. Sharp and Harry U. Strong—showed new designs in many styles. New catalog.

Rex Automatic Print-, Plate- and Film-Washer. Represented by D. C. McCauldwell, Boise City, Idaho. This new device is a cage enclosed in a metal box, the cage containing the prints revolving within the box by the force of the water which is carried through the bottom of the box by a hose leading from a faucet.

C. B. Robinson Son's Company—represented by Mr. C. B. Robinson, president, and Mrs. C. B. Robinson—showed a very elaborate collection of studio-furniture made up of balustrades, pedestals, tables, seats and chairs. A new catalog, to be had for the asking, contains many new and original designs.

Rotograph Photo-Paper Company, Philadelphia, had desk-room, but full information pertaining to their exhibit could not be obtained.

Rough & Caldwell Company, New York, was represented by T. G. Caldwell, who exhibited a remarkably fine line of art-grounds, tapestries, including many novelties and new designs. Their new window-design and stairway received considerable praise. Their latest offering, however, was an air-ship design.

St. Louis-Hyatt Photo-Supply Company, St. Louis, Mo.—Mr. Eisleben and W. R. Commack in charge—had desk-room, and gave comfortable chairs to all who had time to talk awhile.

Schering & Glatz, New York, represented by S. W. Nourse, were kept busy handing out samples of the many chemicals they manufacture for the use of the photographer. Their line shows new developing-agents which will prove of interest to many. The latest great card is "Duratol."

The Seavey grounds and accessories had spacious quarters. No one seemed to be in charge; for on calling twice, we failed to secure the desired information and gave it up. We could not find anyone at home.

The M. A. Seed Dry-Plate Division, Eastman Kodak Company, exhibited three grand negatives and transparencies from them, made by W. S. Lively. The negatives and transparencies are 30 x 60 inches, and were made by a combination of daylight and flashlight. It required a camera which was built by Mr. Lively, and measured in feet 6 1/2 x 11 x 5 1/2. It took eleven gallons of developer for each plate. Many other well-known photographers had exhibits in this handsome booth.

The Seneca Camera Company—F. K. Townsend, secretary and treasurer; L. W. Weil, traveling salesman—presented a very fine and complete line of focal-plane shutters, which are adaptable to any camera made and are also furnished already fitted to Seneca revolving-back cameras. A new feature to this firm's cameras is the sliding front. A full line of cameras and tripods was also shown. A new and handsome catalog is out and ready for distribution.

Shoberg Portable Skylight Company. A new thing and a good thing, in the way of a flash-machine built on the plan of a sky-light, which catches and retains all smoke. D. C. Shoberg, its inventor, and M. K. Eliason were in charge, and during the week photographed all the displays in the dealers' hall. They gave daily demonstrations in their booth on making 8 x 10 negatives by flashlight.

Jas. H. Smith & Sons Company, Chicago—H. M. Smith and J. H. Smith—exhibited their very useful and practical Studio Flash-Cabinet, which possesses many

new features and improvements. By a series of small flash-dishes, a number of exposures can be made in rapid succession, the smoke being expelled through a collapsible pipe which leads to a window or door.

Sprague-Hathaway Company, West Somerville, Mass.—Chas. E. Wallis, treasurer, and J. M. Evans—presented a very striking collection of handsomely-framed portraits in colors. This exhibit was very much admired and on visitors' day was surrounded at all times by the sight-seers.

Sweet, Wallach & Co., Chicago—H. C. Sievers, Manager, T. H. Johnson and C. B. Woitd—made a fine showing of lenses. Their stock of lenses was said to represent over \$10,000. Their signs read "The largest lens-house"—a statement which their large display seems to warrant.

Taprell, Loomis & Co., Chicago—W. A. Taprell, J. A. Cameron, Fred Seyler and J. C. Schultz—had handsome quarters immediately on the right of the main entrance to the exhibitors' hall, and displayed a magnificent line of card mounts in which there were dozens of new designs. There were displayed exquisite examples of photographic art in which their mountings had been used.

Taylor-Hobson Company, New York, represented by Lewis L. Kelsey, had their well-known line of Cooke lenses displayed for inspection, which, as usual, attracted much attention by their extremely beautiful workmanship and unexcelled finish.

The Towles-Schofield Company, Washington, D. C.—W. H. Towles, president, G. R. Cowie, secretary and general manager—exhibited the flash-lamp for which Mr. Towles received the \$100 cash prize at Dayton, Ohio. Many improvements have since been made on it. It catches the smoke and by an ingenious arrangement forming a suction the smoke is drawn backward from the lamp-cabinet and expelled through a collapsible pipe out of the window. Daily demonstrations were given, and negatives of exquisite quality shown.

Voigtlaender & Son's Optical Company, in charge of S. Ericson, made a specialty of the Triple Anastigmat, a three-lens system, F/4.5, made in all sizes; also Heliars, Dynars, binoculars, reflecting-cameras, pocket-cameras and photographs which had been made with these different lenses. The latest catalog was also distributed.

Willis & Clements, Philadelphia, represented by Sam Browning, made a fine showing of prints in black and white and sepia on their celebrated Platinotype papers. They are particularly proud of their Japine paper, and exhibited a very attractive collection of prints on it.

The Wollensak Optical Company—J. G. Magin, assistant secretary; H. O. Bodine, manager of promotion of trade department; L. W. Weil, general manager traveling and sales department—showed a fine line of its lenses, viz., Vitax, Velostigmat and Versar; its two latest products, the Series II Velostigmat, working at F/4.5 with a diffusing arrangement on the front combination of the lens, and the Verito, for soft focusing, F/5, of the rectilinear type, and designed for very soft work. The demonstrations by Ilerr Duhrkoop were made with the Vitax Portrait-Lens, made by this company. A magnifying-glass was given as a souvenir.

Zimmerman Brothers, St. Paul—C. H. Wells and Miss Alice Doty—showed photographic stock. The principal feature was a new idea in the way of a photographer's sign painted in gold upon a black ground and in the form of an artist's palette.

Tony Zabroski, Winona, Minn., exhibited and demonstrated his new attachment for professional cameras, whereby with one loading many exposures can be made. From 12 to 24 plates can be placed in the magazine at one time.

WITH THE TRADE

The Dufay Diophtichrome Plate

THE AMERICAN AGENTS for the Diophtichrome plate, George Murphy, Inc., of New York, submitted samples for tests by the editor during the summer. The manipulation is extremely simple. As is usual with all screen-plates, the plate is loaded into the holder with the glass side towards the lens, and a special compensating ray-filter is used on the lens. The sensitiveness is stated as Wynne F/8, which corresponds approximately to our Class 100 and calls for an exposure of 1 second for average landscapes in midsummer sunlight, or about 1/2 second for marine-views. Owing to the difficulty of getting the exact time with a cap-exposure, we slightly undertimed our landscapes; but we got two excellent portraits when timing by meter, giving 16 seconds on a covered porch at F/8. Working with all solutions at approximately 70° F., we found little tendency for the plates to frill, but noted that when one did start, the emulsion and the screen began to strip together. However, no bad results followed, as the film held at one or two points. The geometrical regularity of the screen is perhaps a trifle disturbing, but one soon gets used to it and by holding the transparency at a greater distance loses the pattern entirely. Comparisons being odious, we shall simply state that those interested in color-photography should lose no time in testing this new material. A hooklet on the process will be forwarded to those of our readers who mention PHOTO-ERA and address the firm at 57 E. 9th Street, New York City.

"Tabloids" for Color-Photography

AS THE POLICY of PHOTO-ERA is to test all new goods before writing about them, we spent some time during the warm weather testing "Tabloid" Rytol, "Tabloid" Reversing Compound and "Tabloid" Color-Plate Intensifier. These products gave good results with Dufay Diophtichrome plates, as well as with another brand. They certainly simplify the process, as the times to develop at different temperatures with concentrated Rytol solution are stated for all makes of color-plates. The acid hichromate reverser is much to be preferred to acid permanganate in actual working — to say nothing of the convenience of simply dissolving the tablets as required at the time of use. The difficulty with the silver intensifier being to keep solutions without deterioration, the superiority of the tablets of acid pyro and of silver nitrate is evident. Workers who are only occasionally making color-photographs with screen-plates will find these "Tabloid" products a boon.

Abel's One Hundred Practical Advertisements

JUAN C. ABEL has at last brought out his long-promised book of advertisements for the professional studio. The series is intended to cover newspaper- and show-case-advertising of all classes and for all seasons of the year. From the small "all the year round" ads. through New Year's, Easter and other seasonable varieties, home-portraiture and photo-finishing, the book "carries" well. The task of making each "copy" not only a good advertisement but an attractive piece of typography has been well adhered to throughout, so that all the studio-proprietor need do is tell his printer to follow copy. For the small sum of \$3 this hook will become your property with the right to use the ads. It is published by Abel's Publications, 917 Schofield Building, Cleveland, Ohio.



WE show above a line-cut of one of the strongest and most attractive posters ever designed to advertise and sell photographic goods. This poster, a lithographic reproduction, possessing an exceedingly pleasing color-combination, is bound to attract in most forceful manner the attention of the public wherever it is displayed. The size of the original is 12 x 18 1/4. We may add that this poster is also shown on a large scale on the outside wall of the factory-premises of the C. P. Goerz American Optical Co. in New York, and as the same poster is used extensively by the other branches of the C. P. Goerz Co., all over the world, the traveling public will soon be familiar with "The Man with the Camera" and will know that the world-famous Goerz products may be had wherever this poster is shown.

Taylor-Hobson's New Portrait-Lens

THE Taylor-Hobson Company of New York has placed on the market a single achromatic lens known as the Cooke Achromatic Portrait-Lens. This is really the old rapid view- and portrait-lens made twenty years ago by Taylor and Hobson of Leicester, England, and known as the R. V. P. For many years lenses of this type have been used by artists like Mrs. Kaesebier, Clarence White and Alfred Stieglitz, and have been preferred by them to the modern anastigmat. It has been marketed as the result of numerous inquiries which have been received for a lens of this type. Whoever expects sharp definition will be disappointed; but the photographer

who desires softness and roundness coupled with fine modeling and true perspective will be both astonished and delighted. Each Cooke Achromatic Portrait-Lens is furnished in an English sole-leather carrying-case, and shows the same fine workmanship that characterizes Cooke anastigmats. The lenses work with a full aperture of F/7.5. Full particulars will be mailed on request by the Taylor-Hobson Co., 1135 Broadway, N. Y.

The Voigtlaender Catalogs

We have received from Voigtlaender and Son, 240-258 East Ontario Street, Chicago, copies of the latest catalogs issued—one devoted to Voigtlaender Lenses and the other to the folding metal cameras. The enviable reputation of the ancient firm of Voigtlaender and Son—founded in 1756—is a sufficient guaranty of the excellence of its products, and users of these goods know that they justify the good name which they enjoy. The older generation of photographers is familiar with the many good qualities of the Euryscopes, and the younger men are employing the Voigtlaender anastigmats in increasing numbers. Besides the symmetrical Collinears, there are listed several unsymmetrical lenses, including the Heliar F/4.5, the Dynar, F/6, the Portrait-Anastigmat, F/4.5, and the Oxyd for process-work. Among the cameras—which are supplied fitted only with the firm's own lenses—we note several new models of pocket-cameras. The Heliar Reflex is particularly rigid and is said to secure absolute perpendicularity of the axis of the lens to the plate—a condition without which—as we have ourselves found by experience—no high-class lens will do its best work. Telephoto attachments are furnished at moderate prices, and the long bellows of the different models offer great advantages. Workers in search of the highest-class apparatus should send without delay to the address mentioned above for copies of these two booklets. The firm also has a New York office, 225 Fifth Avenue.

A New Lens-Catalog

WE are pleased to receive the latest catalog of the Crown Optical Company, Rochester, N. Y., U. S. A. This enterprising firm has made great strides during the last few years, and reports considerable increase in its business. This catalog sets forth the excellent optical properties and finished workmanship of the firm's various photographic lenses, including the Crown Anastigmats, F/4.5, F/6.3 and F/6.8; the Crown Portrait Lens, F/5; the Crown Portrait Symmetrical Lens, F/6; Crown Rapid Convertible, F/8; Crown Wide Angle, F/6; Crown Rapid Rectilinear, Crown Single Achromatic and Crown Condensing-Lenses. In the four

larger sizes the Single Achromatic lenses are made to work at F/6.5, so as to give soft-focus effects. The foci range from 10 to 18 inches. Crown lenses are doubtless instruments of high efficiency, as we can judge by the superb halftone-cuts from original photographs, which show extremely fine technical workmanship. The design on the front cover is distinctly unique. Every camerist in search of a well-constructed and truly-efficient lens should not fail to procure a copy of this valuable catalog, which will be sent free on application by the manufacturers to readers who mention PHOTO-ERA when writing.

The Bissell Colleges

MR. J. H. SCOTT, who has been engaged in the photographic business for the past two years at Ely, Nevada, has resumed the position which he formerly held of instructor in the printing and finishing department.

Mr. Geo. Benedict, president of the Globe Engraving Co. of Chicago, has given a new patent etching-machine for the etching-department at Engraving Hall.

We received pleasant visits last month from former students Frank Meyers, 1908, J. M. Gorham, 1910, Mand Van Borssum, 1909, and Lewis Barrack of 1910. Mr. Meyers is now conducting a studio of his own and his father is taking a course in photography with us.

Prof. Killen has just returned from a vacation-trip to Florida and other places of interest in the South.

Mr. Geo. Saenz, who has just finished a course in photo-engraving and three-color work, has taken a government position in Guatemala, Central America, in the bureau of engraving. Mr. Saenz is only 19 years of age but is a first-class workman in his chosen profession.

Mr. Frank Champion, student of 1905, visited the college for a few days on his way home from London, Eng., last month. Mr. Champion has a profitable photographic business at Long Beach, Cal., and has been abroad attending the Bleriot School of Aviation. He has an interest in a Bleriot Monoplane and during the flying-season will make exhibition-flights. Some photographers are pretty high fliers when they get away from their studios, but we don't believe they will have anything on Frank when the weather's good.

Frank Kilborn Too Busy to Exhibit at St. Paul

THE Kilborn Photo-Paper Company, Cedar Rapids, Ohio, was unable to be represented at the convention. Mr. Kilborn sent word that it was impossible to get time to prepare an exhibit or to spare the time of any of his force, owing to the tremendous volume of orders and the pressure on the factory to fill them promptly.

PHOTOGRAPHIC EXHIBITIONS

Information for publication under this heading is solicited

<i>Society or Title</i>	<i>Date</i>	<i>Entries Close</i>	<i>Particulars of</i>
International Exhibit for Artistic Photography Hamburg	Oct. 1-15, 1911		Gesellschaft zur Foerderung der Amateur Photographie Hamburg
International Industrial Exposition Turin, Italy	Until Oct., 1911		Prof. Emmerich, Dept. Photography and Reproduction 2 Martin Greif Str. Munich, Germany
London Salon of Photography	Sept. 9 to Oct. 21, 1911	British, Sept. 1 Foreign, Aug. 21	PHOTO-ERA

PHOTO-ERA

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Contributions relating to photography in any and all of its branches are solicited and will receive our most careful consideration. While not accepting responsibility for unrequested manuscripts, we will endeavor to return them if not available, provided return-postage is enclosed.

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A SUMMER SHOWER IN CENTRAL PARK
DR. D. J. RUZICKA



PHOTO-ERA

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No. 4

The Experiences of a City Amateur

DR. D. J. RUZICKA

THE city amateur, who, like myself, seldom gets the opportunity to go out into the country, the city parks offer at once the most convenient and the best field for the exercise of his pastime. There it is possible to obtain landscape pictures with or without figures, games, and figure-studies. The winding paths are most attractive, with their graceful curves, the sunshine streaming down now in broad splashes, now in delicate changing streaks, while the trees with their branches and leaves throw down their tracery of shadows. Add to this the constantly changing stream of humanity, children playing on the sunlit paths or on the many little meadows alongside — their elders chatting as they walk along, or meeting a friend and stopping to gossip.

Our own Central Park (and it is there that most of the pictures herewith reproduced were made) with its lakes, boats and bridges offers an inexhaustible supply of pictorial elements. For a year or so I have been doing most of my photography in our parks — mostly in Central Park, as that is most conveniently located. For pure landscape work Bronx Park or Pelham Bay with its views of Long Island Sound offers great opportunities. But it is only lately that I am beginning to see the many beautiful things in our parks, and as my powers of observation are improving with experience I see more and more pictures in the park and less of its mere map-like extent. Fine pictures can be made there at all times, in all seasons, and during all kinds of weather.

I have obtained some very good negatives during rain, at which time the reflections of trees and figures on the wet cemented walks add to the general interest; while the atmospheric quality of such a picture is sure to be delightful. In winter during a snowstorm very good results are obtained.

In such weathers I go out with my 3A Kodak, which, with its Zeiss-Kodak F 6.3 lens, enables one to get fairly sharp negatives of moving figures even in dull light. I do not use a tripod in such

work — with a little practice I am now able to give $1/2$ second exposure and hold the camera steady. If I can lean against a more solid support, I have given one full second without any blurring caused by camera-movement. For such time-exposures one must not use the rubber bulb-release, as it is impossible (for me, at least) to hold the camera steady in one hand, and the compression of the bulb will shake the whole body a little. So I grasp the camera-bed with both hands, place the thumb or finger (according to the position of the release) on the release, locate the picture in the finder and at the proper moment gently press down the release. A little practice without films will make one proficient. With the focusing by scale I have no difficulty; a little practice will enable one to estimate distances with a fair degree of accuracy. One who is used to give $1/50$ up to $1/200$ second exposures to secure moving figures will be surprised to find that much longer exposures may be given and fairly sharp pictures result; in dull light I seldom give less than $1/10$ at F/6.3 — often more. If the figures are moving more or less directly to or away from the camera, and if one waits for the proper moment, satisfactory sharpness is secured. A slight blurring, particularly of the limbs, is even good, as it conveys the impression of motion much better than if all motion be stopped absolutely by a very short exposure.

But it is perhaps on the sunny days at all times of the year, when the park is teeming with human life, that the best results are obtained. To secure these phases of life any hand-camera will do. I have done some good work with my 3A Kodak, but for a year or so I have been using a 9 x 12 cm. Voigtlaender Helios Reflex camera, which I find very satisfactory indeed. With its lens of F/4.5 speed, full exposure can be given even late in the day or in dull light. But I seldom use it at full aperture, because the depth of focus is slight and the distance is too unpleasantly blurred. Generally I use it at F/8 and my exposures are about $1/30$ or $1/25$



IN THE BRONX WOODS

DR. D. J. RUZICKA

of a second in good light at $F/8$. Often I find that my pictures would be better if a little more exposure had been given, but it is the most serious drawback of a reflecting-camera that longer exposures than about $1/25$ are not practicable; the springing of the mirror causes vibration of the camera and blurring of the picture. Even at $1/25$ second and while holding the camera very steady some of my negatives are ruined by such vibration. Of course the camera can be used on a tripod, but then it becomes a pretty clumsy affair. For the high speeds of which the camera is capable I have no use whatever; perhaps only once do I give an exposure of $1/100$ second to a hundred exposures at $1/30$ or $1/40$ second. To take a picture with children or other figures in it I find it best, to select the place and my point of view beforehand, to have the camera focused and the slide drawn, and then, holding the camera in an unobtrusive way, to watch for the moment when the composition appears right, *quickly* arrange the picture on the ground-glass in the hood and expose. This must be done quickly or the figures will become conscious of being photographed and stare at the camera and thus spoil the picture. With a little practice one will do these things almost automatically — focus, arrange, expose and turn camera away without attracting any attention whatever.

Very picturesque bits can be obtained along the shores of the lakes, also very good pictures

with the tall buildings which surround the park in the background — these are sometimes very effective; and if their outlines are softened down a little by a slight haze or fog (and on such days I get my best results) they become very beautiful.

Very picturesque results can be got with these buildings by photographing across the lake in the early morning; at this time the foreground is in shadow, while the rising sun illuminates the tops of the large apartment houses and hotels in Central Park West; and if at this time there be a little fog or mist the buildings seem to rise out of the mist like veritable castles in the air.

On such early mornings I go out with my 5×7 Korona and three or four double plate-holders and a tripod, to secure these evanescent effects. When the sun is a little higher, one or two hours after sunrise, most of the charm is gone. Figure-studies are also very satisfactory at these early hours; the park is almost deserted at this time and one is not annoyed by the ubiquitous little boys who seem to spring in dozens out from the ground wherever one sets down his tripod and pulls out the focusing-cloth.

Whenever possible, I use a ray-filter (three-times "Ideal"); then I give very full exposures — one-half to two seconds in good sunlight — to avoid black shadows, and develop with a dilute developer.



SPRING ON THE BRONX

DR. D. J. RUZICKA

Like all amateurs, I have passed through the stage when nothing satisfied me except microscopic sharpness in both foreground and more distant planes; and how proud I used to be of my lens when the magnifier showed up things in the distance which the eye could not see!—the stage of black shadows and blank white highlights, but now nothing is more repugnant to me than these very same erstwhile advantages, and so I went from the anastigmat to the single element of the rectilinear lens and began to print on softer papers, through sheets of celluloid, etc., to secure softness. A short time ago I obtained a “Smith” semi-achromatic lens of nine-inch focus, and the results I now get with this lens are so superior as to be hardly believable. The image is much softer and the softness can be regulated by the size of the stop. At $F/6$ it is too soft for some things—at $F/8$ or $F/11$ it becomes sharper. I use it oftenest at $F/8$. There seems to be a greater depth of focus and a certain quality which I could never obtain before, and which—to me—is very pleasing. I now use this lens almost exclusively for snapshot work on my reflex camera and for time-exposure work on my 5×7 Korona. Although the lens is listed as a 4×5 , at $F/8$ it covers the 5×7 plate, except the extreme corners, and I make allowance for this in arranging my picture on the ground-glass.

The lens, when made to work at $F/6$, is too large to be used in a 4×5 folding camera with its small lens-board; while the 5×7 lens, of about twelve-inch focus, cannot be used in the ordinary 5×7 folding camera. It can be used on the 5×7 view-camera, but this camera is very much larger and heavier, and I like to have my apparatus light and inconspicuous.

Of plates I have used many different brands in the past, but now I limit myself to but two: the Inst. Iso. and the Orthonon. They both give me very satisfactory results. For the 3A Kodak I use the Eastman film.

Correct exposure was a difficult subject for me. In the beginning I usually underexposed, because my head was full of the ridiculously short exposures which are often advised. Exposure-meters, of which I tried three, were valueless in my hands—I never could determine the exact matching in color of the test-paper with the standard tint. I have, however, made a series of exposures under certain light-conditions on a certain kind of subject, developed carefully and noted the results. I now carry the results of these test-exposures in my mind, and this, with my further experience and a little judgment, enables me to give fairly accurate exposures.

I frequently look up the PHOTO-ERA Exposure-Guide and find that my exposures come



AT PELHAM BAY

DR. D. J. RUZICKA

very close to the ones advised in this guide *as at present compiled*: the beginner cannot do better than follow it. It is a pity that some otherwise-valuable tables allow so small a difference between bright light and very dull — only four times the exposure in dull light as compared with bright sunshine — this is *entirely* insufficient. Some time ago I made some tests as to the actinic value of light, using Solio paper as the sensitive guide, and measuring the time in which I could get the first recognizable imprint of a cross cut out of a piece of cardboard. During one single hour — from 1 to 2 P. M. last August, light varying from bright sunshine to very, very dull (almost dark) and rain — this Solio-time varied (in the shade exposed to the sky) from one second to fifty seconds. From this it seems to me evident that the PHOTO-ERA Exposure-Guide comes much nearer to truth than all the others that I have seen.

Next to exposure, developing gave me the greatest trouble. In the beginning I almost always overdeveloped, and it took me a long time to find out that the developing-formulas as advised by many manufacturers of plates are in most cases too strong; and since I began to use diluted developers my results have been better. While I have used many different kinds of developers and found them all good, I have for a year or so been using Rytol; this comes in tablet form — one tablet of Rytol and one of soda

to be dissolved in four ounces of water. I often used eight or ten ounces of water and a smaller factor than that advised by the manufacturers (in 1 : 8 solution, a factor of 9 instead of 13). It is very convenient, dissolves readily and gives me good results.

A short time ago, however, I began to use Rodinal; and this, it seems to me, is still better; it requires no dissolving — merely dilution with water — does not stain the fingers, and, if used well-diluted, will yield fine negatives. I generally used it in the proportion of one part of Rodinal to eighty of water (one drachm of Rodinal in eight ounces of water at a temperature of 65° F.) and find that my time of developing (I keep my negatives thin) is about seven to ten minutes.

I have used tanks, and for the 3A Kodak films I still sometimes use the tank (but even here I develop sixteen minutes instead of twenty minutes as advised by the Eastman Company), but now develop all my glass plates in the tray and find that my average result is better. I give no after-treatment to my negatives — outside of spotting out pinholes (and I get those in spite of the greatest care) I alter my negatives in no way. With intensification and reduction I had no success, and so I hardly ever resort to them now. I aim to get good negatives in the first place and do not depend on subsequent after-treatment to correct errors which should have been avoided before.



REFLECTIONS — CENTRAL PARK

DR. D. J. RUZICKA

Of printing-papers I have also used many different kinds. Of the P. O. P.'s, I like Seltone best. It is easy to manipulate and yields me very good results. For sunshine-effects the Antique Cream Seltone is very good; when more detail is wanted the Glossy or the Matt Seltone papers are satisfactory. At times I was troubled by blisters on these papers — they always made their appearance soon after the print was taken from the hypo-bath and put into the washing-water (I use running water from the faucet). This trouble puzzled me for some time until I found it was due to the difference in the temperature of the hypo-bath and the running water; in summer the hypo-bath will gradually become warmer until it is of room-temperature — about 80° — while the running water is about 70°. I now keep my hypo of the same temperature as the running water and have no further trouble with blisters.

Of gaslight papers I use the soft varieties as a rule. Special Portrait Velox and Royal Nepera (both white and India-tint) I have found very good. For some landscapes the Artura Carbon Green paper gave me very good results. It is worked the same way as Velox, but is, however, much slower and is best exposed by daylight for from five to fifteen seconds. It appears to be quite permanent. For my best prints I am using platinum paper — either the Willis &

Clement or the American. Although these papers are considerably more expensive than the others, the inherent beauty and permanency of a good platinum print far outweigh considerations of economy.

In concluding, let me assure the beginner that whatever little (and very little it is) I know of things photographic is due wholly to PHOTO-ERA and other photographic journals, year-books and handbooks. Up to two years ago I was an absolutely raw snapshooter, and, had not chance brought PHOTO-ERA to my notice, would probably be one still. The large number of really fine pictures reproduced in PHOTO-ERA gradually improve one's taste and sense for the beautiful, and the criticism and the data given with each picture are invaluable; but these must be read and reread and the information made part of one's mental equipment. And do not expect immediate success — this must take time. It takes time, work and perseverance to produce a good picture; but when you once succeed there is no greater satisfaction known (to me, at least) than to contemplate it.



VAN DYCK learned from the Venetian school how to raise a physiognomy to the height of a type by accentuating its character and its dominating traits. — *Eugene Fromentin.*



STOPPING FOR A CHAT
A BIT OF GOSSIP
DR. D. J. RUZICKA



The Use of Single-Speed Shutters

ARTHUR PENDER

A GREAT deal of prominence is given — and rightly given — in text-books on photography to the importance of correct exposure. It is, in fact, the pivot upon which successful photography turns, all the other operations being comparatively simple and straightforward. Now, a very great many photographers start work with one or other of the simple forms of hand-camera; and they find to their bewilderment that the copious instructions of the handbooks are of no avail. Their cameras have shutters which give only one exposure, an “instantaneous” one, or perhaps are graduated with some such series as $1/5$, $1/25$, $1/100$ second, while the value of the F/number of the stop in the lens — they have read enough to know that this plays a most important part in determining exposure — is unknown to them.

If they conclude from these facts that their cameras are built to employ some other process than that dealt with in books — the “instantaneous process,” to wit — in which the size of the stop and the precise exposure to give the plate or film are alike unimportant, it is a not unnatural conclusion, although an incorrect one.

A shutter which could be adjusted so that it would give accurately any fraction of a second that we wished would seem to be a most desirable piece of apparatus. But no such shutter exists, or has ever existed; nor is it likely that anyone will ever construct such a shutter. It would be far too elaborate and costly, and in actual use would not be any more serviceable than a much simpler one.

The tendency of exposure-meters and tables is to give the photographer an altogether exaggerated idea of the value of small differences in exposure. For instance, two amateurs will discuss quite earnestly whether a certain subject should have four seconds or six, or whether the shutter should be set for a sixteenth or a twenty-fifth. So far from the difference in such cases being important, it is *absolutely undetectable* in the final print, if either exposure is correct.

This statement is so much at variance with the preconceived opinions of many that it will need a little elaboration. It may be put another way. Supposing that we know definitely that a certain exposure (it does not matter whether it is a fraction of a second or many seconds or minutes even) is correct. Then we may be quite sure that if we give twice that exposure, whatever it is, the result will not be perceptibly

incorrect. Or, on the other hand, we may give half that exposure and still not get a perceptibly incorrectly-exposed result. So that, if the correct exposure happens to be $1/50$ second, it does not matter whether we give $1/25$ or $1/100$ second, the final results will be practically the same. Any photographer who has doubts upon this point can set them at rest by the simple expedient of a personal test. He must first find out the correct exposure, and may then expose two plates, one for twice and one for half the correct time. The two plates may then be developed side by side in the same dish, for the same time. They may not look alike in the dish, and the finished negatives may appear to differ; but if each is printed to the same depth it is *most improbable* that anyone will be able to detect any difference at all between them. As one will have had four times the exposure of the other, it is quite clear from this that there is a very large margin, within which any exposure may be regarded as correct.

Actually the margin is wider than one to four or one to five — it is often one to eight or one to sixteen, depending upon the nature of the subject — but if we regard it as one to four or five we shall be well on the safe side.

This margin, or “latitude in exposure,” as it is termed, does away with the need of shutter-refinements. Manifestly, if we cannot tell a photograph which has had $1/25$ second from one that has had $1/100$ second, there is no need to have a shutter that will give us $1/25$, $1/30$, $1/35$, $1/40$, and so on. If each exposure which the shutter will give is four or five times as long as the next one, it will do all that we want. So that, if the shortest exposure is $1/100$, the next may be $1/25$ and the next $1/5$ second. As a matter of fact, a great many shutters are graduated $1/5$, $1/25$, and $1/100$ second and are found to do all that is necessary, in spite of the fact that the $1/100$ nominal is often $1/50$ second or less, and the $1/5$ second is an exposure that is too long for many users of the hand-camera to hold the camera quite still. So that with such shutters the $1/25$ second is the exposure on which most reliance is placed; and, as a matter of fact, nine-tenths of the hand-camera work which is done at all can be done with an exposure of $1/25$ second.

The cameras which are provided with single-speed shutters usually work at this exposure or thereabouts. In fact, if a shutter is not gradu-



ated at all, it is quite safe to treat it as if it were giving a twenty-fifth of a second.

If it is really true that so much work can be done with a single-speed shutter, where is the need for an exposure-meter, and how is it that there is an "exposure-problem" at all? These are very pertinent questions, and questions which should be answered. The stand-camera worker knows that the "exposure-problem" is a very serious one; how is it that it seems to vanish in the case of the hand-camera worker? It does not vanish; it merely takes another form.

The stand-camera worker sets up his camera in front of a subject, and says to himself, "Am I to give this half a second, or ten seconds, or a minute?" maybe. With almost all the ordinary stand-camera subjects, the exposure given may be as long or as short as the plate in the camera may require.

The hand-camera user has no such choice. We may put $1/10$ second as the longest exposure he can give with the camera held in the hand; if he gives longer he gets trouble from movement. The fastest lens he is likely to use will work at $F/6$ to $F/8$, and at these apertures only very open views with the fastest plates will be over-exposed with any exposure longer than, say, $1/50$ second. For most outdoor subjects the exposure required under favorable conditions will be $1/10$ to $1/50$ second; that is to say, will be that given by his shutter which works at $1/25$ second. The problem before the hand-camera user, therefore, is not, "What exposure shall I give?" but "Can I get a good negative with the only exposure I am able to give?"

While the stand-camera worker can adjust his exposure to the circumstances, within very wide



BUILDING AIR-CASTLES

DR. D. J. RUZICKA

limits, the hand-camera worker must adjust his circumstances to the exposure. Hence the value of the exposure-meter to the hand-camera user is that it tells him what he can and what he cannot take. If he works out the exposure for a subject and finds that it lies between $1/10$ and $1/50$ second, he knows that with his single-speed shutter it can be taken successfully. If it requires more than $1/10$ second, he must put the camera on a stand and give a time exposure. If less than $1/50$ second, he can still get it with his $1/25$ second shutter, by using a smaller stop in the lens; but subjects which call for a smaller stop are comparatively rare.

It will be seen, therefore, that because one has only a shutter with a single speed it does not in the least follow that the exposure-difficulty is removed. It is not even lessened. It is only put in another form. If waste and disappointment are to be avoided, the exposure-meter is just as necessary as ever.

Most single-speed shutters are fitted to cameras which have single lenses, which lenses do not usually work at a larger aperture than $F/12$ or $F/14$. With such apparatus, except for extremely open views, hand-camera work is out of the question unless the light is very good. In winter-time, for example, any ordinary landscape with the shadows within thirty or forty yards of the camera will require much more than

$1/10$ second, and it is only wasting a plate to expose it. The camera must be put on a stand and a time-exposure given. In summer, on the other hand, there is quite a wide choice of subject before the user of the single-speed shutter; street-scenes, architecture, seaside-pictures, groups, etc., can all be properly exposed with such a shutter, provided the light is good and the sun has not got low in the heavens. And by "good" light is not meant strong sunshine. A day with plenty of clouds about, when the sun itself is hidden, will still be light enough for a great deal of hand-camera work.

It must not be supposed from this that shutters of a more elaborate character are useless. They are not of much service on cameras which are fitted with single lenses, because these lenses have so small a stop, comparatively speaking, that the great majority of subjects necessitate as slow an exposure as can safely be given with the camera held in the hand. Higher speeds would only lead to under-exposure. But with high-class rapid lenses the case is a different one. Then there will be found great advantage in having a shutter which is more controllable both at longer and shorter speeds. — *The A. P.*



Most people find it easier to imitate than to consult a genuine source of information.



SNAPSHOTS ON THE PARK PATHS
DR. D. J. RUZICKA



Picturing the Seasons

C. H. CLAUDY

WHAT becomes of the old cameras is the problem, like the whereabouts of old pins. What *does* become of them? They don't, like pins, get lost, they do not wear out, nor are they thrown away. Where do they go, these old cameras, and many of the new ones, which are born to fulfil their destiny for but a short time, and then disappear from sight!

Shelved!

That is the answer. The old cameras, and a certain proportion of the new ones, are shelved, put away, their novelty gone, their function stale, their owners turning to pastures new.

The more old cameras are shelved to be replaced by new ones the better, but it is a pity to see a perfectly good instrument put out of commission because its owner loses interest. From a somewhat lengthy experience with cameras and camera-users, the present scribe has come to the conclusion that one thing in particular, more than any other, causes the loss of interest which means shelving of the camera; and one of many schemes for the overcoming of that cause is the subject of this tale.

It is said that few successful farmers, able to retire on their incomes at fifty years of age, live to be sixty. They die from lack of anything to live for; their lives spent in profitable, productive labor, their time of rest becomes a time of stagnation. They die because they have nothing to do!

It is a similar cause which puts good cameras on a dark shelf in the attic to mould and warp. The owner has nothing to do — no special object in his camera-life. For a while, the mere technical operations with their beauty and mystery were enough to attract and hold him — it was less the pictures that he made than that he was forever and always making a picture of *something*. It was the *operation*, not the *result*, which charmed. This feature palling, with the wearing off of novelty, there came the age of making pictures of the family, the friends, long-suffering and patient, then the house and grounds, then the thousand landscapes nearly every amateur makes, and then — satiety. There being nothing left to make pictures of, and, as picture-making itself has become work, the camera is put away!

But let anyone get interested in some one special branch of photography — it may be photophoto-, architectural-, flower-, marine- or

technical-photography, it makes little difference which — and the pictures to be made become a means to an end, instead of the end alone — they are valued not only for what they show, but as a part of a collection. And that is the true end and aim of all amateur photography — to be, not the end, but the means to an end. Its real joy is in the making of pictures, the making of records, the making of collections, the making of something worth while in itself, besides the mere technical joy of making any kind of a photograph.

“But I *have* no special interest!”

I have heard it said many times, and it is precisely to offer you one that I am now writing. If you will try this scheme for a year, you will have a special interest, with a vengeance. Its great beauty is that it is available to all, is of interest to every one, and that each man who engages in it must necessarily get a different collection of results from every one else.

The idea is in the title — the picturing of the seasons.

Now, wait a moment. There is more to it than first appears, and it is not to be completed by going out and making four pictures on four days in winter, spring, summer and autumn.

In the first place, there are several different plans which can be followed, and the one you like best must be decided on first, before you start to work. Two photographers whom I started on this idea planned their work entirely without reference, indeed without knowledge, of each other. Each followed a different plan, and when I brought them together at the end of the year and they examined each other's work, each liked the other's scheme the most and proceeded to do it all over again next year! The first chose a formal garden near his home, and decided to make a collection of sixteen pictures — four of each season — which would fully and completely express the cycle of the earth about the sun.

His winter-pictures showed one fall of snow, one landscape of bare trees and bushes covered with icicles, one bright, windy day, and one very, very dark, lowering, cold, rainy day.

His spring-pictures were all of one huge rose-bush, which happened to have a most beautiful shape and intricate tracery of branches. He showed it budding, in leaf, blooming, and with a young woman in spring-costume clipping from it.

Summer he did most daintily and unexpect-



AT SUNSET

DR. D. J. RUZICKA

edly, by visualizing for the beholder the idea of heat. As it is almost impossible to show heat in a picture, he showed things being made cool, and the idea was unmistakable. A child watering the grass; a thunder-storm with flowers, leaves and grasses dejectedly drooping; the same scene with everything alive and upright and fairly smiling, the sun just beginning to glisten on the wet leaves and grass; and one stunning picture of a single rose with dew on it, formed this section.

Fall was pictured with a wind-storm drifting the leaves, with a gardener making a brush-pile under bare trees and setting fire to them, with several girls picking nuts from beneath a hickory-tree, and with a gorgeous sunset seen through branches nearly bare.

These sixteen pictures were picked from two hundred and seven exposures! You can believe they were a fine collection, but what you cannot imagine, unless you try it yourself, is the pleasure and satisfaction the maker had from his year's work, and the eagerness with which he looked for results with every exposure.

The other worker, a woman, took all outdoors for her field — her results lacked the one point

of showing the same thing under different circumstances, but had the great advantage of taking her out into the country in search of her material. She had a book with fifty pictures, and her idea was less to show the four seasons than to show the whole year. And to make four pictures every month, and have each one show a little progress towards the birth of the spring-flowers or the total death or rather sleep of winter, took considerable figuring. I could not manage a catalog of her entire book, but I do remember a particularly beautiful snow-picture which showed the melting of the icicles, the pools of water under the eaves, as the natural stalactites dripped, dripped away, and also a lovely conception of a sunrise on a lake, in which the sun, driving the morning mists away, was so well rendered that an explanatory title was entirely unnecessary — something one can say for few pictures showing the sun near the horizon, as most might be morning *or* evening.

And to you, as to these, I suggest the attempt to picture the seasons. Go out and make a series of pictures which shall show the weather, the moods of Mother Nature, her changes from day to day, week to week, and month to month.



THE WATER-SPRITES

DR. D. J. RUZICKA

If both of the plans just described seem to you to promise too much in effort and difficulty, try a simple series of four, eight or twelve pictures of the same subject, expressing in these pictures the spirit of the seasons. Much of the success of this apparently simple plan will depend on the choice of a subject. The most natural choice is, perhaps, something growing, as a tree. And certain trees, which have other marked seasonal changes beside that of leaves and no leaves, make very good compositions for this work. A peach-tree, for instance, in bloom, then in fruit, then bare-limbed and finally snow-covered, can show much more of seasonal change than an oak, which lacks both the flowering and the large fruit.

Your one subject for several pictures need not be in your back-yard — since you will take a year to get results you can well afford to travel

a bit three or four times a season to get the very best subject. Nor need you be limited to a single object, considering a tree as an object. A whole garden, a landscape, a brook, a river, a street, may be made the nail on which you hang your idea. Nor need you depend on inanimate subjects. Why not a child, or a group of children, showing in both dress and activity the change in seasons? One of my cherished groups of pictures shows my small son in four poses, which are entitled, somewhat flourishingly, "Smiles of the Seasons." These four pictures are in panel, one above the other. At the top, he has climbed a tree, and stands in a crotch of the limbs, smiling — it is Spring. Summer shows him in an old swing — bare-armed and lightly-clothed — but still smiling. Autumn finds him in the country, both arms full of goldenrod, and grinning happily over their fuzzy tops at me, and



BETWEEN GAMES

DR. D. J. RUZICKA

Winter puts snow beneath his feet, an overcoat and cap upon him, and lets him throw a snowball at his poor old father, who caught it — with the camera.

Why not a cat and kittens, a setter and her pups? Why not a grown person? — a young girl can surely express the seasons in clothes and poses. The subjects are everywhere, ready for you to choose, and if you choose wisely you may make a series of pictures as dear to you as are those of my boy to me, and may easily be far more successful in showing the spirit of the seasons than I was.

Try to get into your pictures something besides technical excellence and good pictorial composition. Have both of these factors at their very best — or as near perfection as you can come — but have, besides, something of the real spirit of winter, of summer, of spring, and of autumn in the photographs.

You won't find it the easiest thing in the world to do. For every photograph which has an inner meaning, which bears upon its face a something which is beyond words to describe, which really expresses a thought, a feeling, a mood, there are a thousand, aye, ten thousand, good technical photographs, as devoid of spirit as a shoe-advertisement is of poetry!

But, just because you are entering on a campaign to capture with lens and sensitive emulsion something of Nature and her truly wonderful birth, growth and final sleep, throughout the year, don't neglect the value in photographic knowledge to be obtained in the operation. Make notes, voluminous notes, not only of

time of day and year, plate, stop, exposure and atmospheric conditions, but comparative notes with other similar attempts; strive to put on paper something of the reasons for pictorial success or failure, as well as success or failure photographic. So shall you make of your experiment not only a matter of interest, an absorbing pursuit, and a reason for the maintenance of your otherwise, perhaps, neglected camera, but a course of instruction in both photography and in art. There is no presumption in the thought — art is for the student as well as for the artist. No man struggles faithfully for expression of his thought, whether it be with chisel, pencil, lens and plate, or hammer and nails and boards, but reaps a reward. You may produce nothing worthy of note or even of notice from an artistic standpoint, yet, if your trials are faithful and your purpose earnest, you cannot help but learn something of art, if only her difficulty.

The mere material dollars-and-cents good you may obtain can hardly come otherwise than through the lecture-, article- or lantern-slide-fields. Yet it should not be difficult to pay for the materials used in such a year's work, if the end at all justify the outlay. The merely pretty landscape is a drug on the market. The series of pictures which tells a story is always salable — and not the less so that it tells a story of landscape. The landscape-photographs are then more than landscapes; they are chapters in a tale; and for such photographs editors are forever on a still-hunt.

There are in such a study certain things which

one had best leave untried. There is no use wasting time and patience after the photographically impossible, of course. But neither is there any use wasting time after the pictorially impossible. So that a group of trees covered with blossoms may be most highly attractive to the eye and sing of spring in no uncertain tones, and yet may be so grouped and arranged that, from the standpoint of balance, unity of composition and line, they are impossible. To work to the very best advantage, therefore, you must have some knowledge of pictorial composition as well as of photographic operations to start with. This need not be extensive nor difficult to secure; a careful reading of a few chapters of any good book on composition — say Poore — will give you the rudiments. But the spectacle of some poor and deluded mortal trying to make a picture out of material which is utterly unsuitable for pictorial composition, when all around him is a wealth of real material just crying out to be sought for and used, is not edifying — hence the caution.

There are two things which are never shown successfully in a photograph — or but once in a blue moon. One is high noon on a sultry day; the other, the golden glow of morning or evening sunlight across a lawn or field. The limitations of the camera and sensitive material step in and forbid the rendition of sunlight with any great degree of verisimilitude, even as those of pigment and canvas make sunlight the despair of the painter. Noon, the most unfortunate time for making photographs, seems particularly under the ban of the pictorialist — dense, squat shadows and a blank sky are never attractive in a photograph, yet a darkened sky and lighter

shadows are so obviously untruthful to this time and condition that they do not carry any degree of conviction, no matter how attractively titled. It is respectfully suggested, therefore, that high noon and flecks of sunlight be considered much as incidentals to a picture, and not comprised in the titles, or used as the subjects of any extensive attempts. You will have difficulty enough with the storm, the rain, the mist, with sunrise and sunset, with bloom of flower and scattering leaves, with wind-rocked trees and drifting snow, without going after anything more difficult.

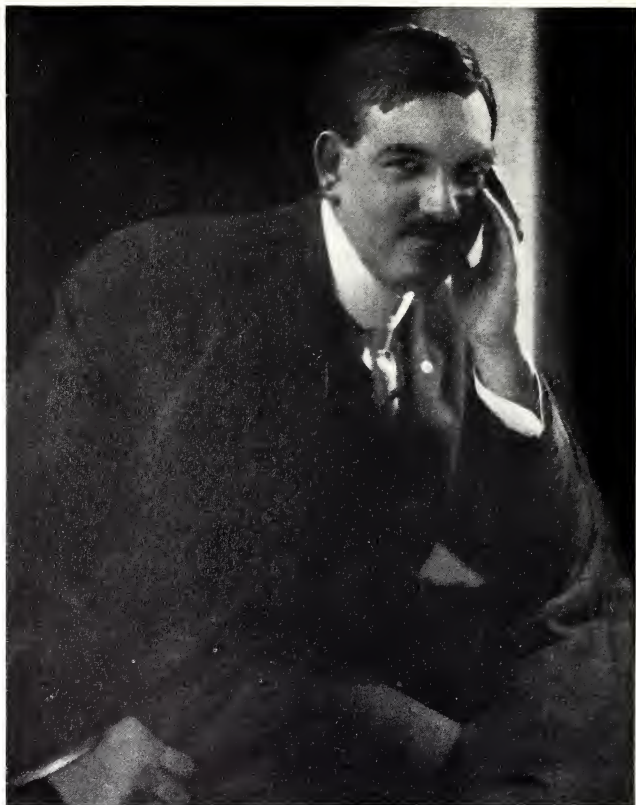
But don't start out afraid of the difficulty! If it were easy to do, it would carry neither interest nor instruction — the whole beauty of the idea is that it is difficult, that it has infinite possibilities of variation, and that it is a field open to every one with a camera — given only the will to do.

[MR. CLAUDY has put into splendid form some very valuable suggestions on a topic which is to be the subject of one of our future monthly competitions. The Editor feels that the greatest value of these contests lies in the preparation which they entail, thus ensuring that the camerist who competes shall work for a definite object and develop his own resourcefulness. We are publishing the paper now in order that all may decide on a concrete scheme of work and be able to secure the picture or pictures representing the fall season this year. Probably the month set for closing will be late in 1913. Certainly a date so far in advance will give everyone sufficient time for painstaking work and the opportunity to make over any subjects which do not result quite successfully on a first trial.—*Editor*.]



THE TOILERS

DR. D. J. RUZICKA



PORTRAIT OF C. H. CLAUDY
ELIAS GOLDENSKY



Panchromatic Plates for Landscape Work

MALCOLM DEAN MILLER, A.B., M.D.

MOST workers are now fairly familiar with the common (or erythrosin) type of so-called orthochromatic or isochromatic plates. Those who are not will find the whole question authoritatively discussed by R. James Wallace, in a booklet entitled "Isochromatic Landscape Photography." This brochure was reviewed briefly in PHOTO-ERA last fall. Copies of it may be obtained at most dealers'. Few, however, have taken the trouble to master the panchromatic (or total-spectrum-sensitive) plate. This unwillingness is due to a variety of misconceptions which it is the purpose of this article to clear away; for the red-sensitive plate offers so many advantages that its use should be the rule with all serious advanced workers who desire correct values.

The iso. plate is indeed a great improvement over the plain plate, for its greatest sensitiveness (setting aside for the moment the extraordinary effect of the blue on *all* plates) is to the greenish-yellow in nature. During the spring and the early summer, when this color predominates in the foliage, a wonderful improvement results from its use, because we recognize, if we think at all on the subject, that the trees are bright and should not be represented as nearly black in the print. The plate, however, renders rather a steep scale of gradation and requires ample exposure and careful development in a weak (diluted) solution to give a harmonious negative. Later in the season, when the leaves have formed more chlorophyll, the prevailing color is no longer yellow-green, but blue-green, and to this tone the iso. plate is much less sensitive. Hence the results grow harsher and less satisfactory, compelling the worker to double or to triple the exposure called for by our tables in order to allow the ultra-violet (which is reflected in immense quantities from all objects in the landscape) to fill in the missing shadow-detail. This difficulty is a real one, and is made more embarrassing by the use of the ray-filter, which dims down the blue in all shadows. Thus we are still confronted by false values in the negative, particularly as the plate fails to record the red which is a component of yellow light, though it gives a dense deposit for the brighter (yellowish-green) component of green light. The result, in practice, is that the trees print too light, as if covered with snow. Such a color-record is often said to be over-corrected by the filter used: when, as a matter of fact, it is underexposed or overdeveloped, or both.

It is often objected that there are so few reds in nature that the use of a red-sensitive plate is unnecessary. I have already referred to the red component of yellow, and I give herewith a reproduction of a print made from the red-filter negative (blue printing-plate) of a three-color set by William H. Kunz. Examination



of this picture will prove that red light is reflected to an extraordinary extent by objects in the landscape. This misconception regarding red-sensitiveness, then, should be corrected; but to clinch the matter it may be well to quote from "Real Orthochromatism," published by an English firm which makes a specialty of panchromatic plates.

"Take two pieces of colored fabric, a bright green and a yellow, and look at them through a green screen. You will see at once that compared with the yellow the green has become too light. The cause of this needs a little explanation.

"A thing is yellow because it absorbs the blue from white light, and does not reflect it. So that all the rest of white light, except blue, is what we call yellow. That is to say, yellow

is white light minus blue. Gas-light, for instance, is yellow because it does not contain so much blue as the daylight with which it is compared. But white light contains red and green and blue (blue-violet). So that if we take away blue from white light, we have only red and green light left. That is, red light and green light together make yellow light. An object is yellow because it reflects the red portion and the green portion of white light but not the blue portion. But a red-blind plate will not see the red in yellow but only the green, and consequently it will see a bright-green thing as too light compared with a yellow thing, just as you see it through the green screen.

"If a red-sensitive plate is used, it records not only the green in yellows, but also the red, and consequently yellows do not appear the same as greens, but lighter."

That the foregoing quotation is sound will be seen by examining the illustration of the ice-wagon which offered me a convenient bright-



yellow test-object. The negative was made on a Wratten Panchromatic plate through an old "Ideal" ray-filter with $1/25$ second at $F/6.5$, at 2 P.M. on March 15. Note particularly the light tone of the yellow paint in shadow, the dark tone of the shaded blue interior of the wagon, and the atmospheric effect of the sky. The values, although not absolute, are almost as the eye sees them — certainly far superior to those recorded by any ordinary ortho. plate.

This brings us to the next misconception — that regarding ray-filters. The worker who is accustomed to iso. plates fears that he must get new screens for red-plates. This is not always so. The unscreened ortho. plate is little improvement over the plain plate, but the panchromatic gives results *without a filter* equivalent to those obtained on an iso. plate with a light-colored filter requiring four to six times the unscreened exposure. Better still, this same five-times screen can be used with the panchromatic plate and will require only about *twice* the unscreened exposure. Refer again to the illustration of the ice-cart and note the improvement in values over the results you have been getting. But if the worker really desires absolute rendering of values, there is available on the American market a screen constructed by R. James Wallace. It is sold either as "Wallace's Visual Luminosity" or as "Ingento, Series B." It



requires an exposure-increase of eight times, and is accurately adapted to all plates which are really panchromatic, that is, sensitive to all colors. As an example, I give herewith a reproduction from a negative made on a Cramer Spectrum plate through this particular filter.

And now for our last misconception — that panchromatic plates are too difficult to work. The beginner, of course, has no business to experiment with this class of material, but the



advanced amateur has little excuse *not* to use it. The problem of darkroom-illumination has been most cheaply solved by Lumière's Virida Papers for use with Autochromes. A light which will not fog the emulsion of these plates is safe enough: in fact, I have developed panchromatic plates directly in front of this light without covering the tray at any time. The results are fog-free, as you can judge from the ice-cart sample. Any rapid, clear-working developer may be used. Kunz's formula, reprinted in "The Crucible" for May, 1911, is one of the best; but there is no need to change from your favorite if it develops in from three to five minutes and does not produce chemical fog. Only be sure you keep the negative on the soft-contrast side. If you overdevelop, you will be unable to print out the values which are visible by transmitted light.

Photography, it seems to me, has scarcely be-

gun to till one of its most profitable fields, the proper rendering of texture as well as of light and shade. This study depends for its success upon the comprehension of values and the understanding of how best to reproduce them. It is throwing away our best agent to neglect panchromatic plates, which are particularly useful for autumn foliage. Their superiority is shown not only in rendering the primaries, but also in getting the correct values in the tertiaries, such as the many shades of brown in leaves and tree-trunks. The V. L. filter is quite satisfactory for all autumn tints.

In a subsequent paper I shall deal *in extenso* with the rendering of clouds and foregrounds in one exposure on a single plate. I hope to present a complete and comprehensive series of illustrations showing just how best to accomplish the desired result with all the devices available for the purpose.

The Organization and Management of a Camera Club

H. LADD WALFORD

ORGANIZATION is one of the most potent factors in human progress. From time immemorial man has advanced socially and intellectually through this benign influence. A retrospect of history alone shows magnificent examples of this theory. The increase in the mental scope of the human race and the centralizing of its power through all the ages since primitive man came, bears testimony to the aggregation of mind and energy. That wonderful wall of China, extending along miles of the ancient kingdom of Buddha; the pyramids of Cheops towering o'er the vast desert of the land of the lotus; the architectural monuments of the Greek and Roman empires or the splendid engineering triumphs of our own century—all attest the grand principle of the massing together of man's power to work harmoniously in congregration.

But this matter of the embodiment of talent and resource of many has not alone been manifested in the material world. The ethical side of human nature has likewise been enriched and propagated until it is but second nature in these days of hurry and achievement to turn to organization for stimulus and direction.

Applying all this, it is the purpose of this article to deal with the organization and management of a camera club. It shall be the purpose of the writer to make the whole range of the subject as comprehensive as possible. Of course conditions are varied in different localities, and no set rules can be laid down. It is hoped that in the whole subject may be found much that will benefit those who are interested.

In these days, when photography has become almost a household necessity, and when everyday life is punctuated with pictorial opportunities, is there any wonder that the use of the camera should lead to means of enlightenment and advancement? The memory of events which have moved the world or which have been milestones in our career are best brought to mind by our mental conceptions of how they looked. Pictures are history itself, and history is life. We can no more do without pictures than we can without printing. It has always been man's habit to portray in some form of picture that which was uppermost in his mind. Thus, early man carved upon rude stone the picture of his god. Later he used the hieroglyph and papyrus. Then came the illumined scrolls of the church, and he has gone on and on in his

desire to portray by pictures until to-day photography is probably the highest development of pictured life.

Have you ever noticed when several persons are gathered together that if the conversation lags or interest seems to be passive, if someone suddenly says, "Here are some pictures," an almost electrical effect is produced? People will look at pictures by the hour when no amount of reading-matter will content them. It is the mental enjoyment which the eye has the power of transmitting to our mind. The camera is one of the greatest boons which manufacturing genius has bestowed upon us. We hardly stop to consider the mighty advance which the photographic art has made from the days when man had only the brush and the pencil. As the pictures which archeological research are revealing to-day have unlocked the past, so will the pictures which our children are making to-day show to posterity what manners and customs of the present are like. There can be no more enterprising gathering of persons than those who have for their ambition the making and the study of pictures. There should be a camera club in every city and town where a constituency exists. It is as necessary, perhaps, as the work of the school and of the church, for it does in a small way the work of both in educating the moral mind in the good and the beautiful.

Of all the senses with which we are endowed, that of sight is the most wonderful. It reflects upon our soul the beauties of the universe and is the key to the heart. The educational features of a camera club are many. Besides being one of the most pleasing of the physical sciences, photography has a distinct pull on the associations of daily life. Never before were there so many users of the camera. The industry has developed a field to which simplicity is the approach. Photography is a household educator to child and parent alike. With the use of the camera, untold regions of research are brought into discussion. The child sees new objects in the pictures which he captures unwittingly in the wonderful film, and his eyes are opened to a new beauty and love of nature each day.

A camera club will attract persons of refinement and culture, because to love pictures is to love nature and to be instilled with the appreciation of the beautiful in life. A camera club will afford help to the beginner in the art of photography and the keen delight of advancement for



THE MAIN CLUB-ROOM OF THE PROVIDENCE CAMERA CLUB

the more advanced worker. This is progress for all. Another valuable asset of such a club is the opportunity for the interchange of ideas. Photography requires much experimentation, and the results of others' experience are always at hand in a club. The best photographer learns something new every day — many times from one less schooled than himself. Again, a new member has someone upon whom he may lean in times of perplexity.

There is also an ethical value to the organization of a camera club in a community. Such a club will have for its precepts matters of a high, moral tone. It will stand for the best in the life of the community in which it is formed. While it offers to the young a pleasant pastime, it encourages the highest ideals in thought and speech. It will attract them from poorer pursuits to a better occupation of their leisure. It is strange that to-day with hundreds of thousands of amateur photographers throughout the land there should be so few camera organizations. The latest compilation shows that there are but fifty-six photographic clubs and associations in the United States and some of these are adjuncts to regular art-schools. Certainly the time is ripe to encourage the formation of more. The material is at every hand. Hundreds of cities and towns will be reached by this appeal in the

interest of the art. The forming of such a club need not mean club-life in the general sense of that word. Such a club need not seduce young people from their homes too much, for the underlying structure of a camera club is of a different character than that of many others. Unlike many purely social organizations, a club of camera-workers is imbued primarily with the spirit of study, and in addition has a good time when occasion offers.

For purposes of convenience we shall divide the subject into four or five general heads which will cover the whole matter. We shall discuss after purpose and needs the equipment of a camera club and follow this up with the matter of management. In conclusion, the financial aspect and the real work of a club will be considered.

Having already spoken at some length on the purposes, we shall next treat equipment. Although proper equipment is necessary, there is a wide range in its ensemble. It would be folly to hold the necessary appurtenances of a large club up as a model to a young one, and it would be equally futile to expect a club of some fifty or more members to get along with a small outfit in one room. We shall treat equipment on the large scale so as to bring out the many points of usage which are to be had. Smaller clubs can

select from the whole that which is suited to their local and individual needs.

A large club of several years' standing will naturally have a complete outfit. The splendid equipment in such large camera clubs as those of New York, Chicago and Boston should not discourage those forming the nucleus of a new club. The point to be brought out is that if there is hearty cooperation the rest will come in good time. It is more than probable that members of a new club will be willing to give the use of their own apparatus for a time until the club is able to buy for itself. Almost everyone has at home articles which will help fit up a club-room.

The location of a club is of importance. Although scanty funds may handicap the selection of some "best" location, the idea of rooms in a modern office-building should be striven for. The club-idea is expressed in a large building far more than in a private house. The latter may seem to offer a homelike atmosphere, yet it lacks the business aspect to be found in a neatly-appointed room in a downtown building, as well as a central location in town. It is better to have one medium-sized room in a downtown building than a whole tenement in a residential district; besides, a member takes a certain pride in his club and pleasure in showing his friends over it. It has an individuality all its own, apart from the home. Then try to locate near as many main car-lines as possible and as near the civic center as money will allow. An elevator to the club-room is a great convenience, but cannot always be had. If janitor-service is not to be had for the price of the rent, individual members may take turns as janitor until the club gets on its feet.

The darkroom is the first item. Much has been written upon this subject and diagrams galore have been set forth upon it. Three salient points are of importance in a darkroom—ventilation, the entrance and the plumbing. A darkroom should be built as far from the cupboard idea as possible. It should be built into the room complete and portable. This type costs more at first, but saves in the end. There should be bottom air-draughts and light-capped ventilating chimneys on the roof. This will allow a steady air current. Nothing is more fateful to good work, especially in the summer time, than hot, stuffy darkrooms. The plumbing should be open and frequent cut-offs should be placed along the pipes. If the club is a small one, a galvanized iron or enamel sink will serve; whereas a larger one, if needed, may be made of thick planks bolted together, with lead caulking in the joints and painted inside with black varnish. Such a sink will last for years. Try to have a

dark maze or zig-zag entrance to the darkroom if space will permit. Although a door is all right, it is inconvenient for another to enter the room if one is working therein. Even a small maze with a curtain is better than a door.

The workroom should be made as convenient as possible. There should be handy places for printing-frames, graduates and scales. A strong table finds its place in the workroom. On it is the print-trimmer or a press. Receptacles for waste should be at hand and there should be drying-places for films, plates and prints. A good film-dryer is made like a cage out of pigeon-wire, and in it the strips may be suspended from clips along wires at the top. Another device, which is good for drying prints, is made of frames covered with cheesecloth and set to run like drawers.

In a small club-room the workroom must also be the studio. Partitioned off with several standing screens and a curtain, a section of the room near the best light will do admirably. Perhaps a studio camera may be bought for the club on shares to be paid off later by the club. Current literature should be at hand. If this cannot be afforded by the club, members will no doubt contribute theirs after reading it themselves. The matter in such journals as *PROTO-ERA* is never old for practical use. A set of technical books is of course a valuable asset, but it can be dispensed with at first.

No definite scheme can be given for individual lockers. The accompanying illustrations show those in the Providence Camera Club which have been in use for years. A great deal of time is saved by economy of space, and the picture shown of the interior rigging of one of these lockers is well worth studying. Not an inch of space is lost and everything is handy. Over forty of these lockers have been ingeniously fixed like those in the cut. A small heater should be placed conveniently in the room to be used for heating developers in the winter time and for general cooking on luncheon-nights. The screens spoken of in connection with the studio may serve a double purpose by being made available for hanging photographs upon at exhibitions. They should be painted a gray tint. The walls of the room may also be screened for hanging prints. One of the accompanying pictures shows these screens in place during an exhibition. They were, as will be seen, placed between the windows of the rooms and pictures were hung on both sides of them.

There are many schemes for laying out an enlarging-room for bromides or for lantern-slides. A north light is the best and a simple way is to adjust a sky-reflector by means of a hinged



A CORNER OF THE LIBRARY OF THE PROVIDENCE CAMERA CLUB

board on which is a sheet of white cardboard and thus throw the light through one of the windows into the enclosed area. A darkroom may be so built as to allow a section near a window to be thus used. Have the developing-light in a box over which curtains of orange and ruby fabric are hung. If the camera is set upon a shelf with runs on it, it will serve for both kinds of work. If there is no space for a separate room for this work, it may be done by the light of the workroom by using the camera against an ordinary window. This method is somewhat longer and the operator cannot dodge the print while it is being exposed. A shallow drawer for unexposed paper is a handy affair in the bromide-room or in that where contact-printing is done.

We now come to the management of a camera club. It is an important department of the club-life and one upon which the success of the club depends. No matter how strong may be the enthusiasm among the members, if the club is poorly managed, if matters important for its welfare are left to arrange themselves, the whole body will become involved in disputes and factional fights. The most important thing is to have an orderly and harmonious system of government. This system must be simple yet thoroughly effective.

A group of amateur photographers having the

common idea of forming a club should arrange to meet at one of the leader's houses. The choosing of a head officer or president together with an advisory board provides for about all the machinery needed. Most of the clubs now have this form of management and it has proved satisfactory. The Providence Camera Club, which is the second oldest camera club in the country, has an admirable system of officers. An outline of its methods may not be amiss here. The club-members annually elect a president, vice-president, secretary, treasurer and four members of an executive committee. The committeemen serve for two years. There are twelve members on this committee, and by the method of election eight experienced members are left each year to initiate the newly-elected four. The president is a member of the committee, as are also the other general officers. It will be seen that by this method the personnel of the head committee is constantly changing and that all the members have opportunity to serve. In this club there are no caucuses for election. All members have the privilege of open nomination from the floor. A majority vote elects and the choice of the whole club is obtained. Several sub-committees are necessary to carry out the work of the club. This list must vary according to the needs of the individual club. The more



important ones will suggest themselves. There should be a room-committee whose duty it is to look out for the general care of the club property and see that things are kept in repair and in order. An entertainment-committee also is to be desired. To this body may be entrusted the matter of suggestions for keeping the club animated, to provide for various lectures, discussions or other forms of diversion which the club may enter into. A publicity-committee must not be forgotten in the list, if the club is to receive its share in the columns of the press. This committee must see to it that all outings of the club are written up for the photographic publications and that all the publicity obtainable is credited to the organization. Upon the efforts of this committee depend in a large measure the standing of the club in the community. Keep everlastingly at it, seeing that the doings of the club get into print, that people may appreciate that there is enterprise and life in their local camera club. Only in this way will the general public know what is being done.

A new-members committee has work to do too. New members keep the club alive. There are constantly changes of occupation which draw good members away. New-member work should

be going on all the time. Resignations are to be expected and should be provided against. Card-catalogs should be kept of prospective members. In the Providence club the new-members committee does this. In some instance this committee goes to the stockhouses and gets lists of "desirables." When the committeemen are about the club-room, particularly at exhibition-times, the work of getting desirable new members is in progress. There are endless ways to get additions to club-membership. If a member is at work with a camera and sees a brother-worker he can often interest him in his club, bring him there for an inspection, and perhaps get him to join. Many photographers never realize how much they missed until they joined a live club of amateur photographers.

Cooperation is essential to growth and progress in a camera club. The officers should take the responsibility of keeping in touch with the individual members and encourage each to become a factor in club-work. The one-man idea should not be allowed to dominate in the doings of the organization. Many clubs are ruined when they really have a bright future before them by the existence of cliques which sap the cooperative spirit and make for discord. At the times of

general exhibitions, each member, no matter how humble, should be urged to put in his or her work and the same should be accorded as prominent a place as that of the most presumptuous.

Meetings should never be held in secret, for this gives the impression that the subject under discussion is not for the benefit of all. Although members not on committees may not enter into discussion at committee-meetings, they should be asked, when present, to sit and listen. Often a word from one such will help in solving real problems of the club's welfare.

There are times when a general meeting of all the members should be called to get the desires of the club as a whole. I know of one club where such meetings are held often and the members sit round in a circle and in turn are obliged to say something for the good of the club. No limit is put to this talk. Both complaints and praise are welcome, and it is wonderful what a wealth of well-meaning criticism comes to hand. These meetings do real good and the club benefits and knows that it is pleasing all.

The question whether to allow women to belong is sometimes raised. A camera club composed of both sexes is highly advisable. Women-photographers are painstaking workers, in the first place, and they contribute largely of their time in carrying out their club-duties, in the second place. They not only add tone to a club, but they are also keen competitors and interested factors in advancement of club-matters. They also take a large share in the entertainment-side of the club's life.

The social aspect of the camera club must also be considered. You all know the old adage about all work and no play. This applies here. Even so pleasant a pastime as photography becomes monotonous at times, if robbed of diversion. Troubles come in photography, as all well know who may have tried some new process for the first time. The kind of diversion proper in a camera club is worth some few words here. This matter comes within the scope of the entertainment-committee but the subject has so many sides that it will bear discussion apart. Smokers are a pleasant form of diversion in the long winter evenings. It is a pretty good plan to have it generally understood that on certain nights of the month there will be something stirring at the rooms. A Saturday night is a good time. The men are usually down street and will drop in for a chat or for a little luncheon if it is provided. This habit will soon become fixed, and will strengthen the life of the club. Members should be provided with a place to play a game of whist if they see fit. Let the table be in some corner where it will not interfere with

those who may want to read. Two good house-uses are never to allow: (1) games of chance or (2) intoxicants in the club-rooms.

A final word as to management. Cleanliness is most important. Keep the club-rooms bright and clean. See that waste papers are thrown into a suitable receptacle. The first impression received by a stranger on coming into your club-rooms may be the means of securing him as a member. Generally, those who are interested in photography are persons of refinement, and naturally a slovenly club-room will not enhance the club in their estimation. Lights and water are two essential cares of a camera club. Both cost money and they should be conserved. If the member who happens to be the last to leave the rooms sees to it that all the lights are out and all water turned off, the problem is solved. Wasteful use is another matter for care and constant discretion.

The money-problem in a camera club is probably the hardest factor to handle of any. In most clubs this matter is constantly before the executive branch of the club. Rent is coming due, the dues of the individual members are in arrears, and what is to be done? There is no safe rule for handling the finances in this sort of a club. It must be threshed out by each. The seriousness should, however, not be allowed to deter its obligation. Properly managed, all will come out right. The assets of a camera club may be, generally speaking, derived from three sources, viz., fees, dues and locker-rents. There may be, at odd times, means to increase the capital of the club-treasury, but only these three may be relied upon. Excessive rent should not be paid. The club, to start with, may not be in the most expensive location, for that would be folly. Some of the older structures where rent is cheaper will serve, and the few inconveniences may be put up with for a while until the club gets on its feet. A club must start humbly and grow. To begin with, a good light room at fifteen dollars a month will do nicely. Twenty members as a nucleus, each one promising ten dollars a year, will pay expenses. Of course this will not furnish the rooms, but where there is enterprise and a will, various individual members can attend to that feature by moving in some of their personal photographic utilities. The cooperation of the lady-members will help make the place attractive. Rugs and carpets are not needed and a library will come later. The lack of facilities need not impair enthusiasm, as the cameras of the members and pictures are the main assets.

Lockers will let at a yearly rate of one dollar and a half and may be made very simply at

first. Later, if capital allows, the portable ones now manufactured may be added. Once paid for, these are a source of constant income and cost nothing to maintain. Dues should be payable as often as quarterly so that there may be few arrears. A new camera club can have little credit to offer to its members. If an entrance fee of two or three dollars extra is asked this will prove a good source of revenue. In the Providence club the dues are eight dollars a year and an admission-fee of five dollars is charged, including the dues for the first quarter. Other sources of income may perhaps be found. Some member may have a stereopticon which he will allow the club to rent. A view-camera of large size offers opportunities at a dollar a day. Churches and schools are all the time looking for lectures. These may be given under the auspices of the club or provided for others at nominal cost and the slides obtained from New York. There must be generosity towards the new club if it is to thrive.

Certainly a newly-formed club can pay no salaries for the services of its officers and the practice is not good even in a larger organization except where the duties involve the whole time of a person. If the club grows and becomes firmly established a janitor may be hired to clean and care for the rooms. The treasurer should take special care to guard against a deficit during the summer months, because at this season interest wanes. The rent must be paid at this time, just as in winter when the club-rooms are populated. Members are away on their vacations and need their money for a good time. Dues of a camera club are not on their minds. As the dues are payable in advance (or ought to be), if a good balance is found at the beginning of summer there will be no trouble to get along until fall.

In all the lists of ardent amateur photographers there surely ought to be enough to form a camera club in every city and town where other conditions are equal. There is no need of money at first. Get together just the same and have meetings; the club will grow afterwards. Club-rooms will come in time.

The work and the results accomplished are the final matters of consideration, and various methods of club-activity will be spoken of that may serve as a guide to those who may contemplate forming themselves into a camera club. Here again no definite plan can be outlined to meet various parts of the country. Such plans must be studied with reference to the locality. There are, however, a few salient features applicable to all. One of the strongest essentials of a camera club is to have something doing all

the time. Exhibitions are the indicators of a club's occupation. It is through display of this sort that outsiders are brought into contact with work of a club and, many times, induced to join its ranks. Every club should have at least one annual exhibition and this occasion can be made the means of drawing together persons interested in photographic work.

The annual exhibition of the Providence Camera Club has been for years an event in the art-world of that Rhode Island city. It annually elicits favorable comment in the press and is attended by over a thousand people. The annual shows of the Boston Camera Club and the New York Camera Club are attractions which the lovers of pictures annually look forward to. The Chicago club and the Baltimore club, too, and most of the others have yearly shows of their work, which are attended by people generally. This shows that there is interest in the work of these organizations, that the public wants to see what is being done in photography and will patronize them liberally. It is fair to assume that any young club will, in proportion, be met more than half way by the local public.

The annual exhibition is also important because it offers opportunity for the publication of a catalog from which may be earned money for the club treasury. Such a publication also will give another means of circulating the good work of the club to the people of the community. Advertising by the tradespeople will more than pay for the book, and it may be made a work of art as well as of reference. Such a book may contain a roster of the club, a list of the committees and any special notices which the club may desire. Properly managed, such a book may yield at least fifty dollars annually.

If there is room on the walls of the club it is a good plan always to have a collection of prints hung. These may be changed from time to time as new ones are made. This will give the visitor a good impression of the club, and afford healthy matter for comment among members.

Another form of picture-study which is now being carried on among the various camera clubs is the print-interchange. Some fourteen clubs are enlisted at the present time. Each club has a collection of prints and they go the round of all the clubs for inspection and comment. Charges are only nominal for membership in this circuit and no end of good is attained by each. This circuit will be followed up the coming winter and information on the subject may be had from the Buffalo Camera Club. A series of this kind allows each club to see what its neighbor is doing and to profit by the ex-



ample if found worthy. At one time a lantern-slide exchange was carried on, and, if found profitable, this is pleasing means of study.

Club-meetings are worth consideration. These should be held by officers of the club often enough to keep affairs running smoothly. The annual meeting will of course be held at the time stated in the By-Laws, but the executive committee should meet at least once a month and hear the reports of the sub-committees. Repairs, the auditing of bills, and the election and discussion of new members all come properly before this committee. Lectures should be given often. Men from out of town who have something to say should be induced to visit the club and talk on subjects akin to photographic work. Travel-series may be obtained. Club-outings form no small part of the year's occupation. On holidays or on Sundays the club may take excursions into pleasant fields where pictures abound, and the day thus be made enjoyable and profitable. Some clubs hold an annual outing and make it an event in the club-year. These and many others are some of the things which a club may do to keep up interest and stimulate the work.

The publicity-feature must not be underestimated. It is only through this channel that the club may hope to grow and flourish. A young club particularly should get all the reading-notices possible in the daily press. Carefully-prepared articles will be kindly received by the editors of any paper. A Sunday editor will always be glad to get the doings of a local club for the art-column. Now and then a paper will use a group-picture of the club on an outing. Notices telling of proposed trips will be inserted, too, if the club-secretary is willing to write them and see that they are sent in. The photo-

graphic magazines of the country gladly receive and print monthly accounts of each club's doings. All this keeps the club in the lime-light. Club-members all over the country like to read what another club is doing and, many times, pleasing correspondence results therefrom.

Members of a photographic club should take an interest in and enter competitions, particularly with other photographic organizations. It is a good idea to have prize-competitions within the club, for it helps the less ambitious.

Some clubs hold monthly meetings for the discussion of photographic topics. Different members take a subject in turn at these meetings and, much in the same manner as at a literary society, discuss it to the advantage of all present. Informality should prevail at such a meeting.

It is now felt that this article has dealt pretty thoroughly with the scope of a camera club. Many of the paragraphs have gone into the matter with some completeness. It is to be hoped that those who are amateur photographers will think over the pleasing possibilities and be urged to get together and form new clubs. The great pleasure to be gained by organization of this sort more than balances the weight of responsibility. Never before was the opportunity so advantageous, and the great photographic fraternity stands at the door of beautiful accomplishment and beckons you in.

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LET no man try to stand by himself and work out his destiny with selfishness as his instrument, but let us all work shoulder to shoulder, the strong helping each other and uniting to strengthen the weak—"All for one, and one for all."—*Harry A. Bliss.*

EDITORIAL

A Traditional Rhapsody

THE rôle of the critic is not always a pleasant one. In telling the truth he is often regarded as a detractor or even as an iconoclast; but the serious student is always willing to learn the truth even though it destroy an illusion or a long-cherished ideal. Guided by the opinions of acknowledged authorities on art, we have been able to appreciate their reasons for stating the exact truth about various works of art, particularly those the merits of which have been extolled beyond all reason. In pointing out the weaknesses of certain well-known masterpieces in painting, the critics did not presume to detract from the master's executive ability, but referred rather to the ruined condition of the work and the destroying influences. In many cases, particularly in that of Turner and other members of the English school of painting, the responsibility for the decay of the pictures lay very largely with the artists themselves. They used fugitive colors, a very general fault among painters of even greater renown.

The theft of the treasured "Mona Lisa" or, as the painting is sometimes called, "La Gioconda," has been the subject of much nonsensical talk by writers who have shown more ignorance than judgment, most of them simply repeating the well-known eulogy of "Mona Lisa" by Vasari, the painter and biographer of artists, who first saw the painting about three hundred and fifty years ago. This was about sixty years after the picture had been painted by Da Vinci, and even at that time it was in a marked state of deterioration. He wrote as follows: "The eyes have the moist radiance which we observe in living persons: the mouth, the lips, the redness of which blends at the corners with the rosetint of the cheeks—this is not painting, but actual living flesh. *These excellences are now concealed by the darkened shades,* but the face still delights us with the wonderful charm of its smile." These rhapsodical comments have been perpetuated by art-critics up to the present day, regardless of the fact that the picture was already in a totally ruined condition many, many years ago. In her text-book recently published, on the works of the old masters, Lorrinda Munson Bryant writes regarding the painting, the original of which she has apparently never seen: "Her smile alone is the wonder of critics and the despair of artists. Leonardo has put on

canvas [*sic*] a smile that is everlasting." The good lady has probably taken for granted that the words written by Vasari three and one-half centuries ago still apply to "Mona Lisa." Alas! the smile painted by Da Vinci has long since departed; the one seen on the famous panel to-day is the work of other hands. Sara Tytler courageously refers to the famous painting as follows: "La Joconde" is now in the Louvre in an absolutely ruined condition.

In his admirable work, "Studies in Pictures," John C. Van Dyke—than whom there lives no more capable and fearless art-critic—writes of "Mona Lisa" as follows: "The 'Mona Lisa' is far removed from the picture Leonardo let pass from his hands. It is only a pale ghost of its former self. All the earnings of the face that Vasari tells us about have flown and given place to leaden hues. The subtlety of the lights and shades, the flow of graceful contours, the beautiful drawing of the cheeks, the forehead, and the throat, the charm of the costume, and the perspective of the background have been worn away, almost scrubbed out of existence by cleaners' hands and a what-not of chemicals. It is a wreck—a precious thing, to be sure—because we have so little left to us by Leonardo, but only a beautiful wreck!"

A Physical Disqualification

THE head of a reputable firm of prescription-opticians confided to the Editor, not long ago, that he obliges his clerks to take care of their health so that during business-hours their breath need give no offence, on account of their unavoidable proximity to customers when adjusting glasses. This goes to show how scrupulously careful other classes of professional men should be in similar circumstances. The dentist, the barber—each is obliged to work very close to the patient or customer, so that to do so, without the least discomfort to the person in the chair, he must be fastidious regarding the condition of his breath. He must not be addicted to any habit which is likely to vitiate his breath, which, should be virtually odorless.

Has it ever occurred to the posing-photographer of the photographic studio that, on account of such a possible weakness, he may unconsciously have driven away a customer? A pathetic feature of the matter is that the victim of the misfortune is generally the last person to know of his affliction.

THE ROUND ROBIN GUILD

An Association of Amateur Photographers

Conducted by ELIZABETH FLINT WADE

This association, conducted under the auspices of PHOTO-ERA, and of which PHOTO-ERA is the official organ, is intended primarily for the benefit of beginners in photography, although advanced camerists are just as welcome and many are numbered among its members. The aim of the association is to assist photographers by giving them information, advice and criticism in the Guild pages of PHOTO-ERA and by personal correspondence. Membership is free and may be obtained by sending name and address to PHOTO-ERA, The Round Robin Guild, 383 Boylston Street, Boston. Send a stamp for complete prospectus.

Suggestions for the Competitions

THE number of amateur photographers is legion, but among this vast number there are really comparatively few who obtain not only the most enjoyment but also the most profit from the pursuit of this always-captivating pastime. The real reason is not far to seek. It is this. Very few amateurs have any definite plan of work. The camera is taken on an outing, for instance, and is leveled indiscriminately at anything and everything. As long as one's plates or films hold out they are used with a prodigal hand, and more often than not the outcome of a summer's vacation is a collection of negatives of no artistic or commercial value, but simply serving to recall to memory certain scenes of an outing.

This accumulation of plates discourages the amateur, for the task of making prints from them is one not to be particularly desired. Many amateurs would find it to their photographic advantage to have lettered on their cameras the following pertinent queries:—

"Is this picture worth taking? What am I going to do with it when taken?"

The editor of this department had a most interesting visit recently with a past-master in the art of making "worth-while" pictures. The collection shown was worthy a place in any photographic salon. This amateur has worked at photography for years, starting with the wet-plate, which entailed so much labor, and yet even in those days his pictures were remarkable for detail and artistic merit. It must have been an arduous task to convey material to the place where the picture was to be made, for if water was not available it also had to be carried. In one instance water had to be taken up a very steep and rocky hill, but the resulting negative of the scene to be photographed was well worth the trouble and labor. If one had in these days to sensitize his plates each time he made a negative, it is very readily to be seen that there would be a great many more worth-while pictures in the world and comparatively fewer worthless negatives.

This amateur has also a rule which he follows and which is one that it would be well for every amateur, old and young, to adopt. He has always a distinct object in view when he goes out to make pictures, and he allows nothing to deter him from that object. Possibly he has in his mind just one picture which he wishes to make, and he may make several negatives of that one subject, but of no other. This method is just what differentiates his pictures from the majority of pictures and makes them a delight to behold.

One object of our monthly contest is to encourage the members of our Guild to cultivate the habit of having some special object in view when making pictures. We therefore select a special subject for each month, publish the list at the beginning of the year so as to give the amateurs not only an opportunity to select the subject or subjects which they like best, but to give them a

definite object to work for in their picture-making. In addition to this, the subject itself is taken up in the Guild Department and suggestions for the best way of treating it given. Working thus along some one line, the amateur progresses much more rapidly and his work is much more valuable than when he turns his camera first on one thing and then on another with a recklessness and thoughtlessness which extracts money from his pocket and does not add anything to his reputation as an expert amateur.

The subjects chosen are carefully selected, with the aim in view to give a wide scope, so that each amateur may select the field which pleases him best and in which he thinks he can achieve the greatest success.

The subject this month is one which gives one unusual possibilities for artistic work. The misty atmosphere is a very helpful factor, because it softens the outlines of commonplace objects, so that, no matter what one's environment, his picture will have certain artistic qualities which a sunny day fails to impart. One may make exposures in a regular downpour, provided he is careful to shield both lens and camera from the rain. A waterproof cover to slip over the camera is very necessary, having it so arranged that one may manipulate the shutter without exposing the mechanism.

The amateur who is courageous enough to go out in a drenching shower with his camera should provide himself with an umbrella-stick, which is a stout stick shod with iron at one end and provided at the top with a clamp to which the umbrella is affixed. This enables one to set up his umbrella at any point chosen for his picture and to shield both himself and his camera from the rain. Possibly one has in view some special scene which he would like to photograph in this condition of the weather. If not, he should decide on or select some locality where he would be likely to get good results in the way of an interesting and artistic picture. Starting out with a distinct place in view, he will get a much better picture than if going without any special aim, only to make some sort of a picture.

A busy street-corner furnishes many good subjects for a rainy-day picture. One should not be impatient, but should wait till just the right combination presents itself, and, of course, with the camera in readiness, one will be able to seize the propitious second for the exposure. Public buildings designed on classic lines, as many of our public buildings now are, furnish particularly good subjects for rainy-day studies. Views which do not include the whole of the building, but only such portions of it as will compose well, may be chosen. The outlines should be slightly indistinct, but one may focus sharply, make as short an exposure as will give a good negative, and then, when printing, interpose between the negative and the paper a sheet of the celluloid which is intended for this purpose.

Pictures made out in the country on a rainy day are always interesting if one is careful to choose the subject



THE START AT SUNSET

HONORABLE MENTION — WATER CRAFT

WARD E. BRYAN

well. A condition of the day when toward nightfall the rain is still falling but the sun is struggling through the clouds is worth watching for. The reflections of objects in the puddles of water add to the attractiveness of the picture, but one must be careful not to have too many puddles, or the effect will be a patchy-looking scene.

One may find scenes of interest along the shore on a rainy day, and as there is always a great deal of reflected actinic light in the vicinity of water, very short exposures may be made even though the day seems rather dark for photographing. Shipping has an air of mystery when photographed on a rainy day, and gives in the picture the "atmospheric effect" which we all strive for in our pictures. Then there are the fishermen in their tarpaulins and sou'westers, either putting out to sea or bringing their catch ashore, and one cannot choose a subject of more diversity perhaps than these very fishermen, particularly if they have followed the sea for many years and are well along in years.

The stop used should be F/8, or larger, because one wishes to admit as much light as possible, and the plate should be a rapid one, preferably of Class I. The developer should be one which has two reducing-agents, one bringing out the detail and the other giving density. The development should not be carried too far, for one wants a plate full of detail and with soft gradations. If the plate is too dense, one loses the delicate tones which are needed to convey the impression of a rainy day.

We have had in former issues many beautiful pictures of rainy days, and we expect that this contest will bring us even better ones than we have heretofore received. Let each member who enters the contest strive to produce something really worthy of the name of picture, and one which shall be worth preserving indefinitely.

A Word About Platinum-Prints

PLATINUM is the one metal which has the smallest tendency to change or deteriorate when acted on by a reagent. A chemical reagent is a substance which is used to ascertain the nature or composition of another substance by means of their mutual chemical action. Platinum responds only in a small degree to any reagent,

therefore the permanency of prints made by this process is next to that of carbon, and if a platinum print is properly finished it has practically the same degree of stability as the carbon print, which, being in pigment, is of course of a permanent tone or color.

Like all other papers, the platinum is made in all degrees of weight and in various textures of surface. One may buy paper heavy enough to be cut up and used for postcards, or light enough to serve as interleaves or added illustrations to books. The smooth-surface papers are the ones to choose for negatives having fine detail and soft gradations of lights and shadows, and the heavy papers are best adapted for portrait-work and for landscapes with broad masses of lights and shadows, particularly for those which are not sharply focused.

Platinum paper keeps well if stored in cans in a dry place. A moist paper is sure to give muddy prints, though perhaps the term "foggy prints" would better describe the effect. To keep the paper dry, a piece of calcium chloride is put in the can in which it is stored. This chemical has a great attraction for moisture and absorbs any which may be present in the paper. A piece of calcium chloride which is moist will, when subjected to heat, begin to hiss or sizzle. When this noise ceases it shows that the moisture has been expelled and the chemical can be used again.

Platinums are partly printed and partly developed. The character of the negative and the temperature of the developer determines its color and brilliancy. For black prints one uses a cold developer, but by *cold* one means that the temperature of the solution should not fall below 65° F. One may buy the developing-salts ready mixed and needing only the addition of water or he may buy the salts and mix his own developer. The formula is as follows: potassium phosphate, 1/4 oz.; potassium oxalate, 1 oz.; water, 8 oz. Heat the water and pour it over the crystals and stir the liquid with a glass rod till all are dissolved. To use, take equal volumes of developer and of water. The developer needs to stand at least a week to ripen, so one may increase the quantity to a gallon, because it keeps indefinitely in solution and works better when it is old than it does

BOATS ON THE NILE
ETHELWYN SWEET
FIRST PRIZE —
WATER-CRAFT



when first prepared. Potassium oxalate costs only 20 cents per pound and the phosphate, 15 cents an ounce.

A warm black is obtained on prints by heating the developer to 125° F., and warmer blacks are obtained by using a still higher temperature, the hotter the bath the warmer being the tone of the print.

When the print is developed it is placed without rinsing in an acid-bath made of chemically pure hydrochloric acid, 1 oz.; water, 60 oz. The acid must be quite free from yellow coloration. The yellow acid will discolor the print. At least three baths should be used if one has more than a dozen prints to make. If not, two baths will be sufficient. The editor has found it a good plan, when making platinum-prints in small quantities, to use the bath for half of the prints, then throw away the bath in which the prints were first placed, use the second bath for the first acid-bath and a fresh one for the remaining baths for the second rinsing. The prints should be well washed in running water, the faucet being turned so that the stream flows very gently into the washing-dish. If the prints have a dull or sunken look after drying, brush them over with artists' fixatif, which will brighten them up and bring out the detail, but will not give a shiny surface to the print.

In the black and white prints one may give the effect of a charcoal-drawing by carrying the development only to a certain depth. Not all negatives will produce this effect, but only those in which the detail is not too sharp and which have what one might call "loose" lines, such as appear in some flower-studies and in the hair in a portrait where the focus is not sharp. These prints are very charming, and it is worth while making special negatives for such prints, as they are very artistic in finish.

Sepia prints are made on particularly-prepared paper and are developed with the same developer as used for the black prints with the addition to the solution of a certain portion of a liquid called "sepia-solution." The solution is used hot and gives a beautiful color which seems to bring out the qualities of a portrait-negative much better than the black and white. If, however, the subject has gray hair, the print should be made on the black and white paper, for gray hair does not look well when represented in brown.

There is a brand of sepia paper which is developed in a cold solution. The makers of this paper keep the formula for the developer a secret, but as it is inexpensive it does not matter. This plan has its advantages,



IN TOW

THIRD PRIZE — WATER-CRAFT

FLOYD VAIL

for when one buys a developer made strictly for one purpose, the resulting prints are pretty sure to be good.

Many of the prints sent to our contests are made on platinum paper, but they might often be improved if the amateur were only a little more careful about the developing and clearing of the print. The acid-bath removes all traces of the iron salts, but unless the clearing process is done carefully, the whites are likely to be discolored. In all process of photographic work one cannot be too careful both as regards the work itself and the cleanliness which should attend all operations.

"Thought-Photographs"

WHEN the art of photographing colors correctly had been accomplished, the lay portion of the world's inhabitants thought that the highest point in photography had been reached; but the worker in photography considers that the science of photography has not yet attained its limitations.

To photograph visible things is nothing; to photograph by invisible light-rays has already been done; and now comes forward a French scientist who asserts that he cannot only photograph by a new kind of light-rays, but that he is able also to photograph that which is invisible, namely, his own thoughts.

The name of this scientist is Darget, and he has long been an experimenter with more or less success in untried fields. Whether the report of his latest results are to be credited remains to be seen, but the account is at least very interesting. He selected a special concrete object and gazed at it steadily for fifteen minutes. He then transferred his gaze to a photographic plate, still keeping his mind intent on the object on which he had been gazing. At the end of another quarter of an hour he developed the plate and found on it an image of the object on which he had been gazing and on which he had concentrated his thoughts. The negatives which he thus made and which he exhibits as proof positive show, on one, an image of a bottle and on the other that of a walking-stick. The experimenter names the obscure light-rays by which he claims to have photographed his thought the "V" rays.

Whether this remarkable achievement is true or not, one may gather from it a good lesson in concentration. One of the principal causes of failure in one's undertakings is the lack of intense concentration on the thing to be accomplished. The first thing to do is to "take thought" and the next is to put that thought into action. Everything made by the hand of man, every plan executed by man, was first a thought or image in the mind of man. The thing to do is first to plan what one wishes to do, put one's thought on the best way to do it and then bend every energy on the successful consummation. This method applied to the pursuit of photography is what places the amateur who practises it in the vanguard of the devotees of the science.

Printing on Silk

A DRAM of dextrine is mixed with two ounces of water and allowed to dissolve. It is then made up to four ounces with boiling water, and, when cold, a solution of one dram of ammonium chloride in two ounces of water is added. As this mixture does not keep well it should be used as soon as possible after being made up.

The silk is soaked in the liquid until it is thoroughly saturated, which should take about four or five minutes, and it is then hung up to dry, suspending it, tightly stretched, from its two top corners. The fabric when "salted," as this operation is termed, will keep indefinitely. All these operations can be done in full daylight.

The next stage is the application of the sensitizer, for which purpose the two following solutions must be made up and then mixed:

A	
Silver nitrate.....	120 grains
Water	1 ounce
B	
Citric acid.....	50 grains
Water	1 ounce

The mixture is spread evenly over the silk with a soft

MILWAUKEE HARBOR

B. F. LANGLAND

SECOND PRIZE —

WATER-CRAFT



camel's-hair brush. There must be no metal in the mounting of the brush that is used.

Particular care must be taken to see that no particle of the surface of the silk is left uncovered. The best way to ensure this is to brush the liquid over the silk, first in one direction, and then crosswise. The process of sensitizing must be done in a weak artificial light, such as at night by ordinary gas or lamplight or in the very feeblest daylight.

The silk is then again fastened up and allowed to dry, but as it is now sensitive to light the drying must be done in the dark. It is ready for printing as soon as it is dry, and as it does not keep well in the sensitive condition, it should be used up within a few days at the most.

The printing, which is done by daylight, is carried out in the same way as for ordinary p.o.p., except that the silk should be printed a little darker than usual. It will be found convenient to gum the edges slightly, and then to fix the silk on to a stiff piece of paper before putting it into the printing-frame, as if this precaution is not adopted there is a tendency for the silk to slip or crease when it is being examined. The silk must be handled carefully while in the printing-frame for this reason, but apart from that there is no particular difficulty. The paper can be taken off again when the printing is finished.

Prints on the silk are toned, fixed, and washed in the same way as ordinary silver prints. The washing should

be thorough, and before the prints are quite dry they should be ironed out to remove all creases.

Printing Photographs on Apples

A CLEVER application of a natural photographic phenomenon is reviewed in a recent number of *Photographic Progress*, the house-journal of the A. M. Collins Mfg. Co. of Philadelphia. The author quoted prepared his apples so as to make them specially sensitive to light by first enclosing them for ten days in black-paper bags made of the material in which development-papers are packed. Experiment having shown that egg-albumen is the only adhesive which would not cause streaky printing, the film-negatives were, at the end of the ten days, pasted to the apples with this medium and the bags replaced, only this time a suitable hole was cut to act as a vignetter. Printing required a week, and produced a red picture on a light-green ground, for whenever the light was held back by the highlights of the negative and by the black mask the green fruit retained its original tone. What more attractive method of producing a photographic souvenir at once original and beautiful for the Christmas dinner could be imagined?

SMALL space is all right when doubt exists as to the character of the audience you are addressing, but when you have your audience interested in your goods, strike out. Sell them.

The Round Robin Guild Monthly Competitions

Closing the last day of every month.

*Address all prints for competition to PHOTO-ERA,
The Round Robin Guild Competition, 383 Boyl-
ston St., Boston, U.S.A.*

Prizes

First Prize: Value \$10.00.

Second Prize: Value \$5.00.

Third Prize: Value \$2.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning picture, or in later issues, will be given Honorable Mention.

Prizes may be chosen by the winner, and will be awarded in photographic materials of any nature advertised in PHOTO-ERA.

Rules

1. These competitions are free and open to all photographers, whether or not subscribers to PHOTO-ERA.

2. As many prints as desired, in any medium except blue-print, may be entered, but they must represent the unaided work of the competitor from start to finish, and must be artistically mounted.

3. The right is reserved to withhold from the competitions all prints not up to the PHOTO-ERA standard.

4. A package of prints will not be considered eligible unless return-postage at the rate of one cent for each two ounces or fraction is sent with the data.

5. Each print entered must bear the maker's name, address, Guild-number, the title of the picture and the name and month of the competition, and should be accompanied by a letter SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in letter.

6. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA. If suitable, they will be reproduced, full credit in each case being given to the maker.

Our Jury

MR. WILLIAM HOWE DOWNES, art-editor of *The Boston Transcript*, who has for several years past assisted the Editors to judge the competitions, is now unable to serve any longer. Mr. William H. Kunz, the well-known pictorialist, who is now residing permanently in Boston, has kindly consented to act as the third member of the board.

Subjects for Competition

August — "Wood-Interiors." Closes September 30.

September — "Shore-Scenes." Closes October 31.

October — "Rainy Days." Closes November 30.

November — "Christmas Cards." Closes December 31.

December — "Home-Scenes." Closes January 31.

Awards — Water-Craft

First Prize: Ethelwyn Sweet.

Second Prize: B. F. Laugland.

Third Prize: Floyd Vail.

Honorable Mention: Ward E. Bryan, Frank E. Colby, John Dove, Leon Jeanne, Dr. Edward Jones, Franklin I. Jordan, Kimbei Narusawa.

BEGINNERS' COLUMN

Quarterly Contests for Beginners

In these contests all Guild members are eligible PROVIDED THEY HAVE NEVER RECEIVED ANY PRIZES OR HONORABLE MENTIONS in the past, FROM ANY SOURCE, AND PROVIDED ALSO THAT THEY HAVE NOT BEEN MAKING PHOTOGRAPHS MORE THAN ONE YEAR.

All prints submitted, except prize-winners, will be returned if postage is sent in a separate letter with the data. See rules 4 and 5 in opposite column.

Prizes

First Prize: Value \$5.00.

Second Prize: Value \$2.50.

Third Prize: Value \$1.50.

Honorable Mention: Those whose work is worthy will be given Honorable Mention.

Awards — Quarterly Competition

SPRING-PICTURES

First Prize: Heywood H. Whaples.

Second Prize: F. R. Smalley.

Third Prize: Tyler S. Rogers.

Honorable Mention: Lois Druse, Stephen C. Glidden, Edward E. Kountz, Clara Shepard, Ira A. Sisson.

Subjects for Competition

VACATION-PICTURES — CLOSING OCTOBER 15, 1911

It may seem that "Vacation-Pictures" is a pretty broad term, but the editors desire to give the real beginners a chance to enter any good pictures they may make during their summer holidays. For this reason it was decided to make the subject broad enough to include everything which might in any way illustrate the title. Thus, snapshots of landscapes, seascapes, figures, animals, buildings and any other objects which offer good compositions or interesting pictures may be included.

To get the greatest benefit out of these quarterly contests, each Guild-member who is thinking of entering any prints should undertake a little course of study covering the field in which he contemplates working. There are plenty of booklets for beginners, some on the photographic processes themselves and others on special fields, such as hand-camera work, marines, landscapes, and orthochromatic photography. These the clerks in the stock-houses will be only too glad to get for you. Technical excellence is necessary if the pictures are to have a chance of success. The negatives must be properly exposed and developed and the prints as good as you can make from them. But the intelligent worker will do more than make a good photograph; he will select his subjects with regard to the laws of composition and remember that some definite idea must be present in his mind to justify the exposure. Perhaps the easiest general rule is to secure simplicity by working close to the subject so as to get a large image and thus exclude extraneous objects, particularly such as would come out nearly white in the print and distract the eye from the principal object.

GENERAL — OUTDOORS — CLOSING JAN. 15, 1912

Any subjects, landscapes, figure-studies, genre, marines and animals.

GENERAL — INDOORS — CLOSING APRIL 15, 1912

Similar to the one above, but strictly interior-views.



TWIXT WINTER AND SUMMER

HEYWOOD H. WHAPLES

FIRST PRIZE — QUARTERLY COMPETITION

THE OLD ROAD

TYLER S. ROGERS

THIRD PRIZE — QUARTERLY COMPETITION





A LATE
SPRING-AFTERNOON
F. R. SMALLEY
SECOND PRIZE —
QUARTERLY
COMPETITION

Answers to Correspondents

Readers wishing information upon any point in connection with their photographic work are invited to make use of this department. Address all inquiries to ELIZABETH FLINT WADE, 743 East 27th Street, Paterson, N. J. If a personal reply is desired, a self-addressed, stamped envelope must be enclosed.

W. P. R. — **To Make a Liquid Glue** which will always remain liquid and ready for use, dissolve the best quality of glue in acetic acid by placing the chips in a porcelain dish and sitting it in a hot-water bath. The glue may be made thin or thick, according to the uses to which it is to be put.

GEORGE T. KANE. — **The Term Hardness when Applied to a Negative** means one in which the outlines of objects are abrupt and strongly marked, the highlights being chalky-looking and the shadows opaque. It is also applied to portraits where the figure seems to be pasted on the background, almost a part of it. Such a picture is also said to have no "atmosphere." Atmosphere in a picture means the impression it gives one that there is space behind the objects as well as in front instead of everything's seeming flat.

M. M. F. — **A Kit is an Inside Frame** of very thin wood painted a dead black and is to place inside a plate-holder in order to use a smaller plate. If one has a camera which uses a 5 x 7 plate and he wishes to use a 4 x 5 plate in it, he places a 4 x 5 kit in his plate-holder, slips the plate into it and holds it in place by small buttons at each side of the frame. They are very convenient articles and also very inexpensive.

V. H. G. — **The Auto-Pastel Paper** is a carbon paper similar to the gum-bichromate, only more certain and more easily developed. It is made in eight colors, and a package of six sheets 12 x 15 in size costs \$1.60. The colors are very pleasing and the process of printing and developing comparatively simple. For particularly-fine prints this is a very beautiful medium to use.

NELLIE TRANT. — **To Make a Paper Negative from a Print**, wax the print to make it transparent, remove the superfluous wax with a warm iron and a blotter and then use the print the same way as you would a negative itself. Tone and fix as for any print and you will have a negative which will not break. The paper negative should also be waxed to hasten the printing. It is a good idea to make a paper negative from a valuable glass negative, for if an accident happens to the original, the paper one will work almost as well.

FREDERIC S. A. — The camera about which you ask is called the **Multiplying-Camera**, and the pictures made by it are called Ping-Pong pictures. With a 4 x 5 camera of this type you can make 1, 4, 9 or 12 pictures on one plate; and with the 5 x 7 size you can make 1, 2, 3, 4, 6, 12 or 24 pictures on one plate. These small pictures usually sell for a penny each, though in summer-resorts and similar localities the price is sometimes as low as 10 cents a dozen and sometimes as high as 25 cents.

ANDREW S. — **The Gas-Lamp for Use in the Darkroom** is simply a lamp to fit over the gas-jet and is fitted with two ruby-glass globes, one being ground on the outside to diffuse the light. The lamp costs between three and four dollars and may be used on any gas-bracket. It is light-tight and prevents the slightest ray of actinic light from escaping. It is an ideal dark-room-lamp, for there is no odor and it is always ready for use by simply removing the ordinary globe and substituting the ruby.

EDNA BRADFORD. — **Retarding-Sheets** are sheets of colored paper made for placing over the negative during the printing-process to hold back the printing and get full detail in the picture. They are particularly good to use with thin negatives and it is said that they increase the detail, make richer tones in the print and give it a brilliance which the direct printing fails to impart.

HELEN YALE. — If you intend to make a **Business of Printing and Finishing Lantern-Slides**, you will find that the small vise made to hold slide and cover together during the process of binding will greatly facilitate your work. It not only leaves both hands free to handle the binding-strip, but it also enables one to

get the binding on straight and true — a rather difficult matter when the binding is done without this helpful bit of apparatus. If you can make good slides there is no reason why you cannot in time build up a good business, for the printing of a good slide is an art in itself and one not achieved by most amateurs.

ALLEN READE. — You can buy a liquid for coating glass which is called **Ground-Glass Substitute** with which you can varnish your glass. It costs 50 cents per bottle, and there is sufficient to coat a great many glasses. In an emergency, this coated glass will do for a ground-glass in the camera; and if the glass itself is clear and without flaws, the coating makes almost as fine a grain as in the finest ground-glass.

D. B. NELSON. — The price per dozen of **Blueprint Postals** is 15 cents, and the manner of printing is the same as for blueprint paper. Expose till the shadows are deeply bronzed, then wash in several changes of water till the whites are clear. To give them a glacé finish, varnish them with the transparent varnish which comes particularly for this purpose. It is very thin and simply gives a clear, glossy finish, the card closely resembling blue Delft china. Blueprints finished in this way are attractive when made from marine negatives. As you live so far from supplies, why not write to one of the large supply-houses and get a catalog? You can then order direct from the list and save the trouble of so much correspondence.

LAURA E. D. — I would not advise buying an **Embossing Die** for stamping your name on your prints. Adopt some simple design and pencil it on the mount. Sometimes a small design may be made directly on the print with very good effect on the composition. The less conspicuous such marks are, the better for the artistic finish of the print. A die would cost you about \$2 or \$3 and the embossing-press would cost \$2.50, but I would advise considering well before purchasing the outfit.

W. E. I. — The **Focal-Plane Shutter** is conceded to be the best for photographing objects in rapid motion, the principle of the shutter being that it gives a shorter exposure than any other shutter and at the same time a larger percentage of light to reach the plate. A shutter for a 4 x 5 costs \$15 and there is an additional charge for fitting it to the camera.

OLIVE W. — **Tank-Development**, while it has only recently come into general use, is by no means a new process. It was not however called tank-development, but developing by the "dipping-process." The plates were set on edge in an upright dish and a very weak solution of some non-staining developer poured over them. They were left in this bath for several hours, coming out as perfectly-developed plates.

CELIA, S. I. — The **Copper Sulphate Toner** is not adapted to the toning of glossy papers, but works admirably on matt-surface papers. If a print has been developed with amidol developer, the copper sulphate seems to produce much richer tones than on those developed with other agents. The range of colors is greater also. One minute in the sulphate-bath gives a brownish black; three minutes, a purplish black; while at the end of four from seven to ten minutes the color resembles that of a red-chalk drawing.

HERBERT FROICH. — A **Combined Bath** is a bath in which the toning and fixing of a print is done in one solution. The hypo is mixed with the toning-agents, and as the toning proceeds the fixing of the print also takes place. At the end of the time required to produce the desired color the print is fixed as well as toned. If placed directly in the rinsing water, prints will sometimes go on toning, so they should be placed in a stop-bath of salt for five minutes, using half an ounce of salt to six-

teen of water. Plates are also developed in a combined bath prepared of developing chemicals and hypo, but this method has not become very popular.

P. T. F. — A **Good Guide for the Exposure of a Plate** is the brilliancy of the image reflected on the ground-glass. In very strong light this image is very sharp and distinct, but in dim light it is hardly visible. There are many gradations between these two extremes, and by noting the clearness or dimness of the image on the screen one learns to judge the length of exposures. The exposure-meters which actually test the actinic value of the light will, however, save plates which would otherwise be wasted; for even experienced professional photographers are constantly deceived when the **actinic strength** does not correspond to the **visual brilliancy** of the image.

Print-Criticism

Address all prints for criticism, enclosing return postage at the rate of one cent for each two ounces or fraction thereof, to ELIZABETH FLINT WADE, 743 East 27th St., Paterson, N. J. Prints must bear the maker's name and address, and should be accompanied by a letter, sent separately, giving full particulars of date, light, plate or film, stop used, exposure, developer and printing-process.

IN THE HARBOR. D. S. F. — This is an extremely interesting picture, for while it is excellent as a whole, it is full of detail which one may study at leisure. It shows four or five vessels drawn up in the dock, their sails furled and the masts towering up in long and pleasing lines. Only a portion of the wharf is visible, just enough to show that the craft have "something to tie to." In the foreground is a small boat with two or three occupants, possibly passengers from one of the vessels. The picture has no strong highlights and was evidently made on a cloudy day, and consequently the artist has secured those delicate halftones which make a picture of this class so effective. The point to be criticized is the manner of mounting. The print is in gray and printed with a white border, then mounted on a card of gray only half an inch larger than the picture itself. This method detracts from the breadth of the scene and dwarfs what would otherwise be a very pleasing picture.

THE HOME-COMERS. B. D. S. — This is a picture of a house — a very attractive house, too, — surrounded by trees which are in their very first foliage, giving an airiness and lightness to their modeling obtainable at no other time of year but in springtime. This picture is very well taken, the point of view chosen admirably, and the exposure, developing and printing seem to be just about right. The fault of this picture is in the figures introduced, — the home-comers. There are about twenty figures represented, but instead of grouping them together the artist has placed them at different points, some on the ground, some on the porch, and each and every one is staring straight at the camera. There is no objection to having the people scattered about instead of massed together, but the artist should have depicted them as doing something. A group on the lawn might be having tea, a small table with tea-equipage being a feature; some on the porch might be enjoying pictures, or apparently listening to a story told by a member of the company; the children might have been represented as playing a game, and thus the artist would have secured a picture which would have been interesting and artistic as well. It would have had good illustrative-value. It seems a pity that this should not have been taken into consideration, for this is technically one of the best pictures which has recently come to the editor's table.

"THE BREAKING WAVES DASHED HIGH," N. F. E. — A mass of rocks, with a white foamy mass which is evidently the surf breaking over them, is all that one sees in this picture. The rocks are detached from the shore, no whit of which is visible in the print. The artist seized the moment when the wave had already broken and thus missed the best time of exposure for such a subject. The bulb of the shutter should be pressed just as the wave is about to break, then one gets the effect of waves, and not that of a woolly mass which might be anything from cotton to soapuds. The title is a misnomer, for in quoting from the poem one involuntarily adds in his mind the second line of the stanza, "On a stern and rock-bound coast," and in this case there is no coast of any sort visible. The focus was not sharp enough for such a picture and consequently the detail is lost. Then, too, the print is small; but had it been a good-quality negative an enlargement would have made of it a fine picture. Try, try again, is what one must do in the pursuit of photography.

THE STORM-CLOUD. K. L. T. — This just escapes being an excellent study of storm-clouds, but the point of view was so badly chosen that it has given us a print with no artistic merit. The picture shows in the foreground the tops of three or four buildings, a shed being one and a square brick building another. From side to side of the picture stretch telegraph-wires, and between these wires are seen the storm-clouds which

for modeling are indeed fine of their kind. It would seemingly have been an easy matter to choose another point for making a picture of these splendid cloud-shapes, but the negative is not even worth preserving, either as a record of the clouds or as a picture of interest, for it certainly is not the latter. The technique is good and the print is well finished in every respect. When taking such a picture remember that while the vision sees perhaps only the clouds scurrying across the sky, the lens sees everything within its angle and is sure to reproduce it on the sensitive plate.

AT TWILIGHT. E. W. O. — This is rather a hackneyed subject, but so well treated in this case that we forget the fault when looking at the picture. It represents in the immediate foreground a sandy shore from which the tide is slowly retreating; in the middle distance a vessel, a three-master, with sails furled, is lying at anchor. The image of the vessel is reflected in the water indistinctly and cut here and there by the ripple of the waves. The clouds in the sky are long, with no special gradation of light and shadow—just the sort of cloud one often sees at twilight. This picture is made with a soft focus, and the artist has attained the effect at which he was aiming, a quiet scene at eventide, and has also succeeded in producing a picture which is a restful one to look at. Again one must criticize the mounting, for this print is on a commercial mount which greatly detracts from the picture itself.

Plate-Speeds for Exposure-Guide on Opposite Page

Class 1/3

Lumière Sigma

Class 1/2

Barnet Super-Speed Ortho
Ilford Monarch
Seed Gilt Edge 30

Class 3/4

Barnet Red Seal
Defender Vulcan
Ilford Zenith
Imperial Flashlight
Eastman Speed-Film
Seed Color-Value
Wellington Anti-Screen
Wellington 'Xtra Speedy

Class 1

American
Anso Film, N. C. and Vidil
Barnet Extra Rapid
Barnet Ortho Extra Rapid
Barnet Studio
Cramer Crown
Defender Ortho
Defender Ortho, N.-H.
Ensign Film
Hammer Special Extra Fast
Imperial Special Sensitive
Imperial Non-Filter
Imperial Orthochrome Special Sensitive
Kodak N. C. Film
Kodoid
Lumière Film and Blue Label
Magnet

Premo Film Pack

Seed Gilt Edge 27
Standard Imperial Portrait
Standard Polychrome
Stanley Regular
Wellington Film
Wellington Speedy
Wellington Iso Speedy

Class 1 1/4

Cramer Banner X
Cramer Instantaneous Iso
Cramer Isonon
Cramer Spectrum
Eastman Extra Rapid
Hammer Extra Fast
Hammer Extra Fast Ortho
Hammer Non-Halation
Hammer Non-Halation Ortho
Seed 26x
Seed C. Ortho
Seed L. Ortho
Seed Non-Halation
Seed Non-Halation Ortho
Standard Extra
Standard Orthonon

Class 1 1/2

Cramer Anchor
Lumière Ortho A
Lumière Ortho B

Class 2

Cramer Medium Iso
Ilford Rapid Chromatic
Ilford Special Rapid
Imperial Special Rapid
Lumière Panchro C

Class 2 1/2

Barnet Medium
Barnet Ortho Medium
Hammer Fast
Seed 23

Class 3

Wellington Landscape

Class 4

Stanley Commercial
Ilford Chromatic
Ilford Empress
Cramer Trichromatic

Class 5

Cramer Commercial
Hammer Slow
Hammer Slow Ortho
Wellington Ortho Process

Class 8

Cramer Slow Iso
Cramer Slow Iso Non-Halation
Ilford Ordinary

Class 12

Cramer Contrast
Ilford Halftone
Seed Process

Class 100

Lumière Autochrome

Exposure-Guide for October

Calculated for Full Exposure of Shadow-detail, 42° N. Lat. at Sea-level.

Exposure for average landscapes with light foreground; river-scenes; figure-studies in the open; light-colored buildings and monuments; wet street-scenes, with stop F/8 (U. S. No. 4) on Class 1 plates.						For other stops multiply by the number in third column.		
Hour	Bright Sun	Cloudy-Bright	Cloudy	Dull	Very Dull			
11 A.M. to 1 P.M.	1/32	1/16	1/8	1/4	1/2	F/4	U. S. 1	× 1/4
10 A.M. and 2 P.M.	1/25	1/12	1/6	1/3	2/3	F/5.6	U. S. 2	× 1/2
9 A.M. and 3 P.M.	1/16	1/8	1/4	1/2	1	F/6.3	U. S. 2.4	× 5/8
8 A.M. and 4 P.M.	1/8	1/4	1/2	1	2	F/7	U. S. 3	× 3/4
						F/11	U. S. 8	× 2
						F/16	U. S. 16	× 4
						F/22	U. S. 32	× 8
						F/32	U. S. 64	× 16

The exposures given are actual — not nominal shutter-speeds. With some shutters, 1/100 = 1/40 to 1/60; 1/50 = 1/30 to 1/60; 1/25 = 1/15 to 1/30; 1/5 = 1/2 to 1/10, etc. If you do not test your shutter, you will have to learn by experience which speed-marking to use. Exposure may often be better regulated by changing the size of the stop than by altering the speed of the shutter. With focal-plane shutters, give 1/3 to 1/6 the indicated exposure. No manufacturer can make plates *absolutely* uniform in speed, but a given brand will average about as listed in our tables.

SUBJECTS. For other subjects, multiply the exposure for average landscape by the number given for the class of subject.

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|--|---|
| <p>1/8 Studies of sky and white clouds.</p> <p>1/4 Open views of sea and sky; very distant landscapes; studies of rather heavy clouds; sunset and sunrise studies.</p> <p>1/2 Open landscapes without foreground; open beach, harbor- and shipping-scenes; yachts under sail; very light-colored objects; studies of dark clouds; snow-scenes with no dark objects; most tele-photo subjects outdoors; wooded hills not far distant from lens.</p> <p>2 Landscapes with medium foreground; landscapes in fog or mist; buildings showing both sunny and shady sides; well-lighted street-scenes; persons, animals and moving objects at least thirty feet away from the camera.</p> | <p>4 Landscapes with heavy foreground; buildings or trees occupying most of the picture; brook-scenes with heavy foliage; shipping about the docks; red brick buildings and other dark objects; groups outdoors in the shade.</p> <p>8 Portraits outdoors in the shade; very dark near objects, particularly when the image of the object nearly fills the plate and full shadow-detail is required.</p> <p>16 Badly-lighted river-banks, ravines, glades and under the trees.</p> <p>32 Wood-interiors not open to sky and with dark soil or pine-needles.</p> <p>48 Average indoor portraits in well-lighted room, light surroundings, big window and white reflector.</p> |
|--|---|

PLATES. When plates other than those in Class I are used, the exposure indicated above must be multiplied by the number given at the head of the class of plates.

THE CRUCIBLE

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With Reviews of Foreign Progress and Investigation

Conducted by MALCOLM DEAN MILLER, A.B., M.D.

Readers are encouraged to contribute their favorite methods for publication in this department
Address all such communications to The Crucible, PHOTO-ERA, 383 Boylston Street, Boston

A New Color-Screen Printing-Paper

J. SURY, of Wyneghem, Belgium, has taken out British patent No. 12,252 for a process of printing in colors on a sensitized color-screen paper from a negative taken through a screen of the same pattern but of complementary colors. The screen is similar to that of the Dioptrichrome and the Thames plates in that it is of regular geometrical pattern. The elements are red, green, and blue-violet, of macroscopic size to facilitate registration. The screen is placed in the camera close to and in front of the panchromatic plate, as in the Thames separate method. No yellow compensating-screen is used, but instead of a ray-filter a special compensating-screen obtained by exposing a panchromatic plate under the taking-screen. The exposure of this plate is timed so that on development it shows variously-graded dots corresponding to the three color-elements. The areas under the red dots are clear glass, those under the green, slightly veiled, and those under the blue-violet, fairly dense. This compensating-screen is used in conjunction with the taking-screen and automatically compensates for the different colors. The absence of the ray-filter, of course, allows faster exposures than can be given to other types of screen-plates.

In explanation of how the required colors are printed on the paper, consider a landscape with a blue sky. All the points of the plate which were under the green points and the blue points of the screen in the camera are exposed, and will be more or less black on the negative, whereas the points under the red points of the screen give a transparent negative. If we look through the negative backed by the screen which was used for taking the same, the sky will be red. But if instead of this screen we back the plate with a screen the points of which are of a complementary color, the negative will be transparent at the blue points and the sky will look blue.

On a paper or other medium are printed, by means of an impression-surface exactly similar to that which has served to form the screen, points of the same width and shape as those used for the screen.

These points are so arranged that to the red points of the screen correspond the blue points; to the green points of the screen correspond the red ones of the paper; and to the blue, the yellow ones. The colors used to make the points on the paper are not soluble in water.

The paper thus prepared is coated with a transparent coating of bichromated colloid (gum, gelatine, or other product) on which the negative is printed after registering the points. This printing will give a quantity of insoluble points covering exactly the various colored points of the paper which must form the image, whereas the other colored points not being protected by insoluble colloid points will, after washing the colloid away in cold water, be washed away in alcohol or other solvent of the colored points. Therefore a blue point will be covered by an insoluble colloid point, and being the

blue point that corresponds to a red point, the sky will be blue; the other points, which are not blue, are washed away and the white paper is at those places all that remains.

The image is thus formed on the white paper by the remaining colored points. As many prints may be made as is desired.

It may be advisable to take away the "stippled" look which the picture now has. The remaining gum-points are therefore washed away in warm water or a solution of carbonate or bisulphite of sodium.

In order to obtain color-points which can be blended (become more or less liquid and flow one into the other) they are made of colors or inks which are insoluble in water, but soluble in another fluid (for instance, alcohol) and are not attacked by the chemicals used in the usual pigmentary photography (carbon, bichromatized gum, etc.).

Such colors are prepared by dissolving in alcohol aniline dyes and colorless resin. This solution is dried and pulverized. A colored powder is thus obtained on which water or the usual chemicals have no action. This powder when mixed with a minimum of fat or oil, in order to obtain a printing-ink, is placed on the paper at the required places.

To blend the colors, the paper is treated by a dissolving substance or its vapor, for instance, alcohol more or less concentrated, or vapor more or less warm of alcohol, according to the desired result.

The action of heat may also be used to obtain the blending, the color-points being in this case mixed with an appropriate easily-melting substance, such as wax, paraffine, or similar products. The result obtained is a softening of the lines.

For registering the negative on the paper, the screen carries, for example, at three of its angles a small opaque point, which will also be reproduced on the sensitive plate, and the paper is provided with three corresponding points or perforations. The registering-points will in no case be larger than a colored element. These points will preferably be constituted by a colored element itself rendered opaque, and will be reproduced on the paper by elements of complementary colors either blackened or perforated.

Enlargements may also be obtained. In order to obtain the exact width of the points of the definite image it is sufficient to enlarge the screen with which the negative was taken.

Although this specification is very interesting reading, practical color-experts are rather skeptical on the matter of obtaining, by any means such as are here described, really good color prints. Should it prove successful, however, there is no question that it will immensely extend the popularity of color-photography, for the general public is little interested in any process which produces only one positive on glass. Mr. F. E. Ives expects to have ready shortly a simple method of printing Tripak negatives on paper.

BOOK-REVIEWS

*Books reviewed in this magazine, or any others
our readers may desire, will be furnished by us at
the lowest market-prices.*

TYROL AND ITS PEOPLE. By Clive Holland. Copiously illustrated in color and monochrome. Demi-octavo; price, \$2.50 net. New York: James Pott & Co.

It is gratifying to note that European travel has long ceased to be the novelty it was twenty-five years ago. There are many travelers who, after their flying tours through Europe, yearn for a more intimate acquaintance with certain countries and their peoples. Of these none is more interesting than Tyrol, the western province of the Austrian Empire, on account of its magnificent scenery and its sturdy, patriotic people. The author has evidently fallen in love with his subject, for he has presented it in the most attractive manner possible by both word and picture. The many carefully-written accounts, in German and English, which we have read of this very interesting country, are surpassed by that from the eloquent and brilliant pen of Mr. Holland. Whoever may read this charming volume, be he even entirely familiar with the scenery and history of Tyrol, will be captivated by the glowing description of such places as Innsbruck, Sterzing and Spinges, around which cluster historical reminiscences of that brave and upright patriot, Andreas Hofer, who made a gallant though unsuccessful fight against his country's invaders, being at last captured and shot.

A chapter is devoted to the fantastic Dolomites, which are now attracting deserved universal attention; for they have been sadly neglected in favor of the brilliant capitals of Europe. The other mountainous districts—and Tyrol offers scenery of the rarest beauty of snow-capped mountain-chains—are fully and charmingly described. Although not strictly a part of Tyrol, the picturesque old city of Salzburg furnishes one of the most delightful topics in the book. It is very apparent that this ancient ecclesiastical city is unrivaled for picturesque situation and rare historical objects. In vain the author likens it to Naples and Constantinople, although, in our opinion, it approaches nearer Edinburgh in point of topographical structure; yet the Scottish capital does not rejoice in so entrancing a view as that of the receding river Salzach, obtained from the heights of Hohensalzburg.

The illustrations are exceedingly beautiful, the photographs being particularly well selected and superbly reproduced. The color-plates are a joy. The volume, in its every aspect, offers delightful and instructive entertainment, and is a credit to its publishers.

THE STORY GIRL. By Ellen Montgomery. Price, \$1.50. Boston: L. C. Page and Company.

It is a mistake to suppose that only books of a frivolous or meretricious character meet success in these days of frivolity. Books written in a cheerful though serious vein, and in excellent English, find appreciative readers.

If the author have a story and tells it in a refined and effective manner, he cannot anticipate failure with the reading public. The books by Ellen Montgomery are built upon a high moral plane; and also by reason of their literary merits have gained well-deserved popularity.

PHOTO-ERA is only too glad to welcome an opportunity to commend the books of this gifted writer. In this charmingly-written book, "The Story Girl," Miss Ellen Montgomery shows an intimate knowledge of children,

with their many interesting moods and ways. "The Story Girl" is, beyond question, a children's book written for adults, and, whereas the story cannot fail to fascinate and entertain young people, the delightful style, vivid descriptions and knowledge of human nature will be wholly appreciated only by "grown-ups" who do much discriminating reading. Anyone who loves children will find this story a delightful vehicle for self-forgetfulness, and will consider it a welcome addition to his book-shelf.

HANDBOOK OF THE TREES OF NEW ENGLAND. By Dame and Brooks. Illustrated by Elizabeth G. Bigelow. 12mo. Cloth, \$1.50 net; flexible leather covers, \$2.00 net. Boston, U. S. A.: Ginn and Company.

Of the many camerists interested in the study of trees and arboriculture, not a few have inquired of us the title of an intelligent and trustworthy guide or reference-book. Of just such a character is the handy volume by Messrs. Dame and Brooks—accepted authorities on the subject. By means of illustrations made from living specimens, and including inflorescence, fruit, winter-buds and leaves, together with a lucid and complete description of each particular genus and variety, the student cannot fail to identify each tree under consideration. In every case the habitat is given, and under the head of "Horticultural Value" the requisite information is furnished for an intelligent choice of trees for ornamental purposes. So far as is consistent with due precision, popular terms have been used, as well as the Latin botanical names. The volume will prove of the utmost value to every lover of trees, and should occupy a place in the library of every home.

THREE WEEKS IN THE BRITISH ISLES. By John U. Higginbotham. 328 pages. 50 full-page illustrations from photographs. 12mo. Price, \$1.50. Chicago, 1911: The Reilly and Britton Company.

Here is a brisk, discursive account of a hurried trip through England, Scotland and Ireland. It takes the form of random notes jotted down as things struck the fancy or attracted the attention of the author. It is not a guide-book, but it contains a tremendous lot of information of the sort which one often looks for, without success, in the regulation works. From time to time the current of observations is broken by the insertion of a pun or of a humorous story or a "flyer" at some insular custom. Altogether it is a readable and interesting little work, having an atmosphere of its own which does much to give the reader a vivid mental picture of the places visited. The illustrations are travelers' snapshots of more than average quality and are, in many instances, more interesting than set "views" would be.

STEADMAN'S COMPLETE EXPOSURE-METHOD AND HOME- PORTRAIT HELPS. Second edition, revised and enlarged. By Frank Morris Steadman. 7 1/4 x 5 1/4 inches; 49 pp.; 14 illustrations by the author. Cloth, 75 cents. New York, 1911; Photographic Topics.

Mr. Steadman's system of exposure is based on the actual testing of the light by means of printing-out paper. A piece of paper is exposed through a star-shaped aperture in the cover of a memorandum-book until a just-visible image is printed. The time of printing is counted accurately according to a system devised by the author, and the time of exposure then determined by reference to tables printed in the book, or it may be calculated with the AABA Exposure-Scale, which is supplied for 25 cents. The illustrations show accurate

timing, but are marred by poor reproduction, apparently from chalky originals such as are demanded by most photo-engravers. Valuable hints on the treatment of faulty negatives immediately after fixing are given; also hints on posing and lighting under at-home conditions. Many workers will find this book useful.

BERLIN LETTER

MAX A. R. BRÜNNER

For many years the United States made energetic efforts, on the principle of the doctrine, "America for the Americans," to combine all the states into a strong commercial community, thus making themselves independent of Europe. These Pan-American efforts were not confined to industry, but also included arts and literature. Attempts were made to seclude themselves from foreign competition, in order to further production. Although a high tariff was fixed against industry, legal protection of artistic and literary matter was made almost impossible through a series of cumbersome and disagreeable conditions. The end aimed at was, indeed, reached; and if we consider besides the immense sums spent by philanthropic millionaires for educational purposes, there is reason for regret and envy.

In photography, too, the country of unlimited possibilities can boast of notable achievements; and at the great International exhibitions we have had a chance to see some samples of the progress made there in artistic photography. But the works of German photographers, amateurs as well as professionals, are also appreciated across the water, and this is to a great extent expressed in the cordial reception given to the masters of photographic art. For instance, the owner of a large photographic firm, Mr. Edward Blum, who is president of a certain influential society, made an official tour to the United States last year and is full of praise about the honors of which he was the object. Another notable event is that the president of the Photographic Association of America, Mr. G. W. Harris, invited the well-known German artist, Rudolf Duhrkoop, who has a studio in Berlin and one in Hamburg, to come to St. Paul to give lectures and demonstrations on the occasion of the National Convention. The local and the photographic press noticed the fact, and the appearance of this distinguished representative of German photographic art was considered the chief event of this year's meeting. Such an *entente cordiale* is indeed a splendid means to improve the good relations between German and American photographers, and perhaps the time is not far distant when an exchange of photographers will develop, as is the case with professors the last few years.

As is well known, there is this summer a large International Exposition at Turin, Italy, where photography is also represented. In that country there are a number of congresses and among these we will call attention to the photographic one at the capital, Rome. Its purpose is the founding of photographic archives in all countries. A rich and attractive show of pictures is seen in the Roman pavilion of the Engelsburg Garden. The Italian private exhibitors are less obtrusive, and only the Ministry of the Exterior is well represented by fine pictures from Somaliland, the Club Alpino with pretty Alpine scenery, and the Genie-battalion of the Roman army showing wonderful color-photographs and balloon-pictures of Pompeii, Rome and the lower Tiber River. The Parisians, Viennese and Dutchmen are worth mentioning, also the American, Perret, who exhibits scenes of the

destroyed Messina, and of eruptions of Vesuvius and Etna. Perhaps the Germans make the best show, as the Italian press affirms without envy. Mr. Duhrkoop is among the best with his master-portraits. Hugo Erfurth, Dresden, and F. Schensky, Heligoland, are other notable artists. The first-named has received a recognition of his capabilities by Berlin University, which celebrated some weeks ago its centenary. He presented to the University a work about the Royal University containing a collection of portraits of the professors. In return, the Senate presented him with a wonderful *plaque* (medal), four inches in diameter, showing the Emperor on horseback, while the reverse side bears the inscription: "*Universitati Fredericæ Guilelmæ, Berolinensi, Sæcularia Prima, Agenti*." The medal is given away only as a decoration and is never sold at art-stores.

Some months ago I mentioned in one of my letters certain recent improvements in Roentgen photography. Meanwhile the Seventh Annual Roentgen Congress took place in Berlin, connected with an exhibition of such pictures. Much has been done since the last congress a year ago, and the greater precision of the photograms was very noticeable. The progress is chiefly based on a change in the methods employed, and these improved pictures are now called lightning-photograms. A Mr. Dessauer solved the problem of taking Roentgen views in 1/100 second. Formerly the source of light was a tube glowing brilliantly while the shutter was opened for 1/100 of a second. By the new method, the shutter is constantly open and the tube is made to light for only 1/100 second. Of course an extremely powerful light is required. We saw pictures of teeth showing the latter perfectly transparent, bent roots, dental nerves, damages and so on. Thus not only the physician but also the dentist will in the future benefit by X-ray photography.

But it is not only in science and its application that Germany is noted, but also in educational matters. At several schools photography has been recently introduced as a new subject to be taught. Leading educational experts were asked for an opinion, and the replies were all favorable to teaching photography. It is pointed out that this art is to be welcomed as one of the best branches of handicrafts-instruction, and the only condition is that the children should not spend too much money for their photographic experiments, nor should the other school work suffer by it. We know from experience how enthusiastic many pupils are with their camera-work. It is intended to instruct in one or the other branch of scientific photography according to the talent and inclination of the young man, viz., architectural, botanical, zoological, artistic and other photographic branches. This helps to increase the general interest in these matters. Photography and its younger brother, cinematography, are now almost indispensable, and the Moscow city government has resolved to introduce the latter into the municipal schools—a plan which I learn has also been tried by some American schools. A picture taken from real life, whether "moving" or not, says more than several well-written pages.

While I am writing about this subject I will mention that even in social life the value of a photograph is more recognized than that of the mere word or name. In Paris society, for instance, it has become the fashion to issue menu-cards which contain not only the name of the lady whom you are to escort to dinner or supper, but also her portrait. This card is given to every male guest when he enters the reception-rooms of his host. How the latter obtained the photograph remains his or her secret. It is intended to introduce this curious novelty into Germany, too, particularly as these cards are not thrown away after dinner, but are kept by the recipients as much-appreciated souvenirs.



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Our Booklet R answers the question “What lens shall I buy?” Write for it to-day.



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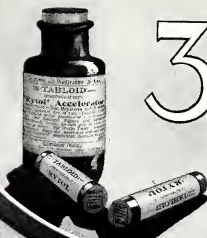
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OUR ILLUSTRATIONS

Edited by WILFRED A. FRENCH

THE picture chosen to embellish the front cover is "Reif bis zur Ernte," by H. Y. Simmons, an English worker of high rank. It was published for the first time in PHOTO-ERA March, 1908, and attracted universal attention. The picture makes a powerful appeal to the imagination by its suggested power and quiet beauty. A simple peasant woman, as Millet would have painted her, calmly contemplating the fruits of the grain-field ready to be harvested, is the dominating feature of a picture which is simple in detail, yet tells a story suggestive of toil and hardship. The force and breadth of the composition are very impressive, but not immediately does the mind estimate fully the degree of poetic fancy and creative skill that gave it pictorial utterance. The timely presentation of this significant rural scene will doubtless lead many of our readers to direct their thoughts to the approaching harvest-season and its culminating observance in Thanksgiving.

The work of Dr. Ruzicka is well worth study by ambitious camerists. He has himself stated in his article that all he knows of photography he has acquired by reading photographic literature and constantly practising, with care to profit by his mistakes. Technically, he has brought his work to a high standard and seems to have mastered completely the question of exposure by taking pains to give ample time for the shadows. Such a course, followed by adequate development in a diluted solution, which has produced a soft, harmonious negative, gives a delightful printing-quality and retains in the print the delicate gradations visible in the negative when viewed by transmitted light. Pictorially, too, Dr. Ruzicka's pictures are gems. Here is a man with the soul of an artist. Unerringly he selects the satisfactory composition and the most suitable lighting, eliminating the unessential and the obtrusive, thus succeeding, where so many others fail, in producing real pictorial bits from unpromising material. Our city parks are full of beautiful effects devised by the landscape-gardener, but too often they are rendered pictorially impossible by the inclusion of objects which destroy the sentiment of the scene. The soft-focus lens has helped notably to attain the results we show here; but, after all, it is the man and not the tool that is responsible for the artistic feeling and sure selection.

The frontispiece shows admirable judgment in waiting for the exact moment when the figures were at the right spot to give a satisfactory balance. The rendering of atmosphere is convincing because the more distant planes stay back—the result of not overdeveloping. Data: 3A Kodak; Zeiss-Kodak anastigmat, F/6.3; 1/10 sec.; Rytol; 5 x 7 enlargement on soft bromide paper.

"In the Bronx Woods," page 168, is a good example of proper exposure to secure the effect of sunlight. Most wood-interiors are underexposed and overdeveloped. Data: June, 4 p.m.; sunny; 5 x 7 Korona; "Smith" lens, 9-inch focus, used at F/8; Cramer Inst. Iso., x 3 ray-filter; 3 sec.; Rodinal; Glossy Seltone.

The picture of the two little girls by the Bronx River—a charming stream in the old days, according to F. Hopkinson Smith, and still capable of yielding pictorial material, as proved by Dr. Ruzicka—conveys the feeling of spring not only in the rendering of the light-toned foliage, but also in the handling and placing of the figures. Data: May, 4 p.m.; diffused light; R. R. lens of 11-inch focus used at F/8; x 3 filter; 1

sec.; Standard Orthonon; Rytol; Artura Carbon Green.

"At Pelham Bay," page 170, has suffered greatly in reproduction and does not adequately present the original. Data: Similar to the others, but using the "Smith" lens on the reflex camera.

"Reflections," page 171, is one of several charming examples of the handling of the buildings on Central Park West to which Dr. Ruzicka refers in his article. The tones of the distance were given up as hopeless by one photo-engraver, but another finally succeeded in making a satisfactory plate.

On page 172 are two capital snapshots, full of human interest and, withal, good compositions, though the path behind the tree in the upper view might have been spotted out to advantage, as it seems a continuation of the belt of the child's costume.

As an example of successful handling, "In Central Park," page 174, is excellent. Only those who have tried these *contre-jour* effects know how difficult they are. Data: June, 4.30 p.m.; intense sunlight; 5 x 7 Korona; "Smith" lens at F/8, Orthonon; x 3 filter; 1 1/2 sec.; Rodinal; Matte White Seltone.

"Building Air-Castles," page 175, is the best of several similar prints. In this one the attitude of the figures is wholly satisfactory, the girl's arm forming the necessary bond to link the two closely together and convey the sentiment. Data: 6 a.m.; light clouds, Cramer Inst. Iso.; 1 1/2 sec. at F/8; Rodinal, 1 in 80; Glossy Seltone.

The two snapshots on page 176 are interesting because of the shaded foreground—a device favored by artists, particularly Charles Hallet Davis.

"At Sunset," page 178, excels in its rendering of both foreground and sky and in the mysterious effect of the mist lying in the hollow.

The three girls in bathing reminds one of a Cadby. The print is a delicate bromide enlarged 2 1/2 times from a 3A negative tank-developed for only fourteen minutes, instead of twenty.

In "The Toilers," page 181, Dr. Ruzicka has given us a well-balanced and attractive composition, though the beautiful tonal-quality of his enlargement on Barnet Cream Crayon Bromide from a small part of the original negative has not been adequately reproduced. The effect is heightened by the contrast of the grim reality of work with the scenes of play-time which come before it. We see that the camerist is versatile, though he has wisely chosen to confine himself in the main to one field, instead of frittering away his energies in several departments. Data: March, 11 a.m.; intense sunlight; Heliar Reflex Camera with Voigtlaender Heliar lens used at F/8; 1/100 sec.; Cramer Crown; Rytol.

In lieu of a portrait-group of our literary contributors, which we had hoped to present in this issue, but failed to do because the few prints received were not satisfactory, we proffer, on page 182, an excellent likeness of an able writer, whose activity is equaled by his ability. Those who are familiar with his writings—and PHOTO-ERA averages five of his best papers during the year—cannot fail to discover what Mr. Goldensky has so well interpreted. Mr. Claudy is a close, shrewd and accurate observer, honest and firm in his convictions, and *au courant* with his subject. The likeness is excellent, but the rough gum-print was too much for the engraver.

The picture by Georg Klippert, a German professional portraitist, page 185, shows a covered wooden stairway

leading to the main portion of a sturdy medieval castle, from the court-side. It is a picture totally without pretension, made up of simple means, and yet it seizes upon our interest and holds it. We have here a poetic treatment of a supposedly unresponsive architectural subject, which demonstrates the truism that the camerist with a soul can see beauty even in stones.

The prints illustrating Mr. Walford's article on camera clubs are mere records and not particularly good ones. They are published as a warning of how NOT to take interiors. The original negatives were evidently somewhat underexposed and developed too long in a strong developer, so that the gaslight-prints lacked gradation.

"The Modern Lark," page 193, shows us another side of Charles H. Flood's pictorial ability. It is, to be sure, "only a snapshot," but it requires discrimination to catch just the right moment for exposure on a fast-moving aeroplane. Mr. Flood has placed his principal object well with reference to the cloud-forms and has thus produced a satisfactory picture.

Our Monthly Competition

THE Water-Craft contest was not remarkable for the number of entries as compared to previous, similar contests. This is probably due to the increase of interest in other sports— aeronautics, motoring, base-ball, etc. It has also been found that the photographing of watercraft from moving boats cannot be practised with the deliberate care which marks camera-work on terra firma. Moreover, Mortimers and Norries have not a numerous progeny; and many of the American pictorialists, whose marine-studies attracted considerable notice a few years ago—such workers as Vandervelde, Brookins, Willard and Sheer—have been singularly inactive of late, as illustrated by the following letter received quite recently: "I regret to state that, owing to the nature of my regular business, I have not touched my camera for nearly two years. Besides, where I am now living, there is a lack of my favorite camera-material. Nevertheless, I try to keep up my interest by reading photographic literature, including PHOTO-ERA MAGAZINE. I am yearning for the time when I can devote sufficient leisure to the art, so that I may resume sending you acceptable prints."

However, the pictures presented in this issue do not warrant the indulgence of pessimistic reflections. Far from it. In the winner of the first prize, Miss Ethelwyn Sweet, American pictorialism has gained a worker of eminent originality and enthusiasm. Her forte seems to be architectural and monumental studies, in which department she shows strong artistic temperament in the grasp and treatment of her subjects. (See her bold interpretation of a Roman fountain, which was reproduced in the June PHOTO-ERA, 1911.) Nevertheless, her individuality is noticeable in an adequate degree in the placidly-moving Nile boats, page 197. The design is striking. The picture fills the eye, the three pointed sails forming a well-balanced picture. Data: No. 3 F. P. K.; Bausch & Lomb R. R. lens; Feb. 1910; The Nile; full sun; taken from excursion-steamer; stop F/8, exposure 1/100 second; pyro developer; enlarged print on Royal Bromide; M. Q. developer.

The atmosphere of Milwaukee Harbor has been capably rendered by Mr. Langland, page 199. The arrangement is pleasing in the extreme. The steam-barge forms a significant foil to the lofty group of sails at the right, the whole presenting an impressive scene. The picture is also beautifully spaced. The format is nearly square, which is somewhat unusual in a successful composition. Data: Contact bromide print from an enlarged paper-negative; original on 5 x 7 Seed 27 plate; 14-inch focus rear combination of R. R. lens; stop F/16; October, about 9 A.M.; light, hazy.

With somewhat indifferent material at his command,

Mr. Vail has contrived to produce an interesting pictorial effect, page 198. It is obvious that judicious trimming was a strong factor in the case. The eye is thus led from the clumsy-looking barge, past the tug, to the objects in the extreme distance; and one thus becomes aware that the perspective is one of the chief merits of this picture. Data: May 30, 1911; 10.30 A.M.; slight haze; Suter R. R. lens, 8 1/2-inch focus at F/16; 1/100 second; Wellington Anti-Screen plate; pyro; enlargement on Wellington Cream Crayon Bromide.

In view of the rapid progress that is being made in aeronautics, Mr. Bryan's picture, page 196, must appeal to all. The subject is Glenn H. Curtiss's hydro-aeroplane. It is purely a water-craft invented by him to skim along the surface of the water, resting on a boat-like contrivance which, in turn, rests on the water's surface. By tilting the planes the aviator can rise from the water and fly in the air. He can re-align on the water when he wishes and skim along again. On this particular occasion, towards evening, a pupil of Mr. Curtiss's was making a test-run of twenty miles up Keuka Lake, on the shore of which, at Hammondsport, N. Y., the factory is situated. He carried one passenger—a naval officer from Washington, D. C. The picture is a technically-superb performance and a credit to Mr. Bryan's well-known ability. Data: July 3, 1911; 3 A. Kodak; Eastman N. C. film; R. R. lens; stop F/8; 1/100 second; 7.30 P.M.; light, dim sun just setting; enlargement on Cyko paper.

Beginner's Competition

THE present competition appealed to a large number of inexperienced camera-users, but only a few succeeded in conveying a clear and pleasing impression of the subject. The rock on which the majority of contestants wrecked their craft was technique. Failure to comprehend the nature of the developing-solution resulted in contrasty prints, which defect was augmented by short exposures and forced development.

Mr. Whaple's effort, page 201, is commendable. Skillful manipulation, from start to finish, and a marked sense for the beautiful are the author's strong points. The picture is little more than a bare record. Data: April 1, 1911; good light; 5 x 7 Cycle Graphic; Zeiss-Tessar IIb; 8 1/4-inch focus; stop F/16; ray-filter; 1/3 second; Standard Orthonon; "Ideal" M. Q. developer; 5 x 7 platinum print.

"The Old Road," page 201, is a creditable piece of work by a very young beginner, whose photographic activity is limited to considerably less than one year. The picture has several obvious faults, the most serious of which is careless focusing, the farthest trees being the sharpest in detail, whereas a reversal of this feature would be more logical. The general arrangement, however, the lighting and spacing, are in the main satisfactory. Data: May 13, 1911; about 1.30 P.M.; light good; Brownie No. 2 A; stop F/16; shutter-exposure, highest speed; Eastman N. C. film; hydroquinone; Carbon Velox print; M. Q. developer.

A fitting appreciation of the beauty of his subject enabled Mr. Smalley to produce a charming study, page 202. By throwing the background into the shade, he has suppressed irrelevant detail and emphasized the foreground with its effective floral groups, which furnishes the *raison d'être* to his picture. In spite of this device, the light playing on the tree-trunks produces a disturbing effect, which might have been avoided, in a degree at least, had the exposure been made, say, one hour earlier; or had the light been softer. Data: 5 x 7 Tele-Photo Cycle Poco; B. & L. Symmetrical lens; stop F/64; June, 4 P.M.; light, clear; 2 seconds; Stanley plate; metol-hydro; Aristo Platino print toned in gold and borax bath and platinum; fixed in hypo 10 minutes.

ON THE GROUND-GLASS

Damaged Prints No Longer Eligible

FOR more than a decade PHOTO-ERA has been receiving photographs from participants in its prize-competitions from all sections of the country. These prints have been sent either through the mail or by express; some of them were protected by stiff cardboard and others, according to our special directions, in heavy cellular boards, cut and placed together with the corrugations running at right angles with each other, ensuring the contents against damage in transmission. Other prints—and, in truth, most of them—were sent enclosed within some of those ready-made, convenient and really attractive mailing-devices, which, however, consisting chiefly of one single sheet of flimsy cellular board, offered scarcely any protection to the photographic print placed against it, except, occasionally, in sizes of about 5 x 7 inches and smaller. Consequently, of the large number of prints forwarded to us during the past ten years, through the mail, at least twenty-five per cent arrived in a more or less damaged condition—because they were sent either in flexible corrugated boards, pieces of paper-boxes, or in the neatly-deceptive mailing-devices already referred to. Whenever the merit of the damaged print warranted the trouble, we resorted to well-known and also to original methods to repair the injury, sparing neither time nor expense, but in most cases the damage done was irreparable. Now, however, that a really safe and practical mailing-device has been placed upon the market, an article costing but a trifle more than the treacherous "safety" mailing-boards, with which the senders of photographic prints are more or less familiar, PHOTO-ERA will discontinue its voluntary rôle of print-repairer. It has performed this function long enough, cheerfully and at its own expense, charging the same to Profit and Loss. Prints arriving after November 1, 1911, in a damaged state, due to causes mentioned above, will not be considered eligible in the contests in which they are entered, and if the stamps for their return be found, the prints will at once be sent back to the sender.

How We Protect Our Readers

A GRATEFUL READER, living in a western state, took the trouble to express to us his sense of security when purchasing second-hand articles advertised in PHOTO-ERA. He states that not long ago he bought a 4 x 5 folding camera, nearly new, advertised in a daily paper. Soon afterwards the same paper contained the "ad" of a person offering a reward for the outfit, which appeared to have been stolen from him. Conscience-stricken, the new owner of the camera at once communicated with the advertiser and, entirely convinced of his claims, surrendered the outfit without even considering the question of a *quid pro quo*. The "fence" was prosecuted. "Nevertheless," our correspondent writes, "I did not hesitate to secure a similar outfit through an 'ad' in PHOTO-ERA. The owner cheerfully informed me that before PHOTO-ERA accepted this small advertisement (cost, \$1.20) it required him to furnish satisfactory references. He was only too pleased to comply."

Soft Prints from Sharp Negatives

DESIRING to impart softness to his prints from excessively sharp negatives, one of our subscribers resorts to single sheets of linen bond-paper—without water-marks

—which he places between the film side of the negative and the sensitive paper and prints in the usual manner. Prints prepared in this manner possess a fair degree of softness, but are marred by the web of the paper through which they were printed. This is particularly noticeable in the lights and half-lights of the pictures. Softness of outline or detail may be obtained by a more practical means, viz., the use of a sheet of thin, translucent celluloid. By using more than one thickness, almost any degree of softness may be obtained. This medium is without blemishes and offers no resistance to the light. It is the nearest approach to window-glass.

Decency in Amateur Photography

THE action of Emperor William in stopping peremptorily the photographing of private individuals, their homes, etc., has been universally applauded. While apparently tyrannical in some of his methods, the German sovereign has at heart the welfare of his people and, as sovereigns go, he has more than fulfilled the wishes of his subjects, according them protection against the heartless methods of the press-photographer. It is now England's turn to follow the example of the German government. King George and members of his family have been subjected to all sorts of annoyances and indignities on the part of the voracious press-photographer.

We are glad that the English photographic press has taken the matter in hand, and it is sincerely hoped that it will exert itself more than has been the case with the American photographic journals to abate the nuisance of the rightly-termed "camera-fiend." It seems, however, that the criticism of the English photographic press is directed particularly against the amateur photographer, who appears to have been guilty of infractions of public decency by annoying members of the royal family in order to secure surreptitious pictures. While commending the efforts of our English contemporaries in trying to correct the evil, we are glad that the amateurs in America have shown more consideration towards public and private individuals. The trouble in this country is confined almost entirely to the press-photographer, whose activities are curbed in only one state, viz., New York.

Harry D. Williar

VACATION-TIME brings to the editor the pleasure of meeting many of his contributors on their trips to Boston. A recent visitor was Harry D. Williar, of Baltimore, with whose pictorial work our readers are familiar. Mr. Williar informed us that he has lately gone into the photographic trade as president of the Maryland Photo-Stock Company in Baltimore. As an evidence of his appreciation of PHOTO-ERA, Mr. Williar, before he left Boston, placed a large order for copies of the magazine to be sent monthly to his shop. For a new undertaking, his has been remarkably successful during its first season, and we trust that our readers will remember this house when placing their orders. They may the more readily do so, as Mr. Williar, being himself an expert and practical photographer and a pictorialist of great ability, is in a position to give sound advice on the selection of an outfit or on any other problem confronting the photographic worker.

Since we penned the preceding, Mr. Williar has written that he sold all of his first order of PHOTO-ERAS within a few days and has ordered an increased supply for the next month.

NOTES AND NEWS

Announcements and Reports of Club and Association Meetings, Exhibitions and Conventions are solicited for publication

The Bridgeport Convention

THE annual meeting of the Photographers' Association of New England has passed into history as an event at once unique and unconventional. No photographers' convention has ever been like it. Originally planned to be held in the Bridgeport Armory, it was transferred to more commodious quarters on Steeplechase Island, a miniature Coney Island, with airy, well-lighted buildings, open booths and exposed platforms accessible to sunshine and the breezes sweeping across Long Island Sound. The affair bore the character of a country-fair, but minus the bewildering revelry of pleasure-seekers. Fortunately the fates were kind, and fine, bracing weather greeted those who attended; only one day, Wednesday, being somewhat chilly and giving those who had provided against an unfavorable change in temperature a decided advantage. Everyone present, whether exhibitor or visitor, was forced to indulge in the healthful exercise of walking in the open air, the result being a tanned complexion and a big appetite. The attendance was smaller than had been predicted; but a more earnest, discriminating and interested throng of photographers probably never attended a convention. Yet there was no lack of merry souls, whose spontaneous and wholesome humor imparted a desirable degree of diversion and cheer. The spirit of genuine fun infused by such wags as George W. Harris and J. P. Haley will be gratefully remembered by all.

A noteworthy feature of this memorable meet was the limited number of purely educational features, including lectures and demonstrations. Of expositions of new or improved apparatus there were plenty, nearly every dealer or inventor doing his share in this regard. As a result more orders for goods and material were booked than even at the National Convention at St. Paul. The novelty of holding the convention on Steeplechase Island reduced the necessity of providing the customary diversions — trolley and auto-rides, picnics, etc.

The Association picture-exhibit was a treat and an education, the artistic standard surpassing that of any previous convention. The high and refined atmosphere was due to the great pictorial advance shown by such eminent workers as Goldensky, Garo, Bishop and Sykes, and the special displays of that strong coterie, the Photo-Pictorialists of Buffalo and the newly-formed club, The Boston Photo-Clan. The industrial exhibits were full and attractive, several dealers showing their entire line of specialties. Personally, we regard the Bridgeport meeting as a positive success and highly creditable to President Garo and his able associates.

Owing to unforeseen difficulties with concessionaires regarding space for dealers' exhibits, the opening exercises were postponed to the afternoon. After the usual preliminaries, President Garo called the meeting to order at 2:30 p.m. Mayor Buckingham delivered the address of welcome, to which Morris Burke Parkinson responded in his customary felicitous vein. Short speeches by H. J. Seeley and J. P. Haley of Bridgeport followed, when Secretary Hastings presented to President Garo a silver-mounted ebony gavel, the acceptance of which was fittingly acknowledged by the presentee. The session closed with a scholarly and illuminating address by President Garo. For the evening's enjoyment a dancing-

party was arranged in the exhibition-hall, about fifty couples participating.

Wednesday, at 10:30 a.m., a jubilant demonstration announced the arrival of the New York City delegation, 107 strong. Headed by Wheeler & Wilson Band, the procession proceeded from the station to Association headquarters at The Stratfield, where the delegation was welcomed by a committee of the P.A. of N.E. Special electric cars conveyed the entire party to the Island, where, accompanied by the band, it marched along the now-famous "Avenue of Photographic Industries" to the band-stand, where it was harangued by the incomparable orator, H. A. Collings. Stationed near the exhibition-hall, the band discoursed sweet music till 2:30 p.m., part of the time parading up and down the avenue.

The afternoon was given up to studio demonstrations, the inability of the artists scheduled to be present necessitating several changes. Thus, lighting and arrangement of the model was explained in turn by Charles Wesley Hearn, Dudley Hoyt, Pirie MacDonald and Elias Goldensky. The views of the last two speakers were entirely opposite. Mr. MacDonald's method is to interpret the individual character and calling of the sitter, while Mr. Goldensky prefers to depict him according to a mental picture formed of him — not by philosophical analysis or a preconceived notion, but by his personal predilection based upon his own ideals of beauty.

Thursday forenoon was devoted to inspection of dealers' exhibits, booking orders of materials and supplies and entering subscriptions to PHOTO-ERA MAGAZINE. The chief event during the afternoon was the baseball game, photographers vs. manufacturers. It was a terrific conflict, but sadly marred by errors. Innumerable bases were pilfered, and few runs were earned. The battle raged until called on account of darkness; the manufacturers now scoring so many runs that it was impossible to count them. Fortunately no accidents marred the swiftest, although third-baseman Rice clouted his straw hat instead of the ball.

While the ball game was in progress, the citizens of Bridgeport, admitted free to the grounds, inspected the various exhibits in the main building and in the booths. At eight o'clock in the evening Main Street, for more than a mile, was densely packed with people, eager to watch the flashlight photograph made by the Multi-Speed Shutter people of the ambulance-service and fire-department as they dashed past The Stratfield Hotel. Elaborate preparations had been made for three separate exposures, but owing to outside interference with the electrical connections, flash-pans, etc., only one successful flash was fired.

After the excitement outside The Stratfield had subsided events within the hotel were in order. The lecture by Oliver Lippincott, of New York, took place in the ball-room at 8:30 o'clock. The audience profoundly appreciated the numerous beautiful lantern-views of Arizona, the Indians, their ceremonies, as well as their eloquent descriptions by the great speaker. Coincident with this illustrated lecture was a meeting of the New York dealers in the banquet-hall.

Friday was far from a pleasant day. The wind was high and raw, and before noon a drizzling rain set in. The first business of the day was the election of officers.

Garo had steadily refused to consider a re-election, so the attempt to induce him to run was given up. The new officers are: President, F. A. Frizell, Dorchester, Mass.; first vice-president, A. Allyn Bishop, Newport, R. I.; second vice-president, D. J. Bordeaux, Springfield, Mass.; secretary, George H. Hastings, Haverhill, Mass.; treasurer, W. H. Partridge, Boston. The place of the next meeting is to be Springfield—a choice due to intelligent and systematic canvassing of the voters by representatives of the Springfield Board of Trade, who had beautifully printed and illustrated books, setting forth the advantages of their city. Particular stress was laid on the new convention-hall just completed. We highly approve the choice, as we believe it is a good thing to hold the meetings in the large New England cities in all parts of the territory in the association.

Spectators at the ball-game Thursday observed a flock of six or seven fine sheep feeding in the outfield. On Friday they were the central figures in the sheep-roast given by the Photographers' Club of Bridgeport, an event which occurred at 1 P. M. The members present were somewhat dampened in their ardor by the bad weather, but the sheep were a great success. "Jay Pay" Haley and his associates were praised for furnishing the best eating of the convention. At 2.30 the public was admitted to the grounds and many flocked to the exhibition-hall to view the pictures. Most of the manufacturers and dealers, however, packed up and got away before night. At the same time, the Citizens' Committee of Bridgeport was conducting a tour of the city for members and their families. Heavy rain prevented the band-concert and grand carnival in the evening.

The Pictorial Exhibit

PRESIDENT GARO has maintained all along that the greatest educational value of a convention is the exhibit of photographs. He contends that the way to better one's work is to study the successes and failures of others, comparing their results with one's own and seeking the reasons for shortcomings. The removal of all restrictions from the exhibit resulted in the entering of a vast mass of material, some mediocre, but most of it good, sound photographic work; some of it, indeed, unusually fine. In all, 660 prints and about 16 autochromes were shown. Space does not permit an extended review of the pictures, and although we spent every available moment in the exhibition-hall, we feel that we could not adequately study the pictures. There was matter for careful consideration extending over several days.

The loan-exhibits, which were an innovation in a photographic convention, attracted a great deal of attention. The Boston Camera Club generously responded to Garo's call with 66 of the best pictures from the fine exhibit held at the Boston Art Club last spring and reviewed in our columns. The prints occupied an entire section. All classes of landscapes, marines, figure-studies and portraits were there in abundance, and the quality of the work was uniformly high. Technical merit, combined with good, sound composition and artistic feeling, was evident in every print. It is seldom that one sees so uniformly high a standard in the work of a club.

The Photo-Pictorialists of Buffalo sent work which was a revelation to many professional workers whose energies are confined to portrait-photography. Indeed, we doubt whether there is in this country any organization of camerists whose work shows the same steady progress year after year towards a higher pinnacle of artistic and technical achievement. Their show comprised 23 large prints. John M. Schreck had one beautiful marine of schooners tied to a wharf, the spacing and handling being excellent. G. Edwin Keller

showed 4, one of them a decorative study of a scraggly pine, Japaneseque in treatment; another, a foreground-study of a stream in winter. Oscar C. Anthony had 2, of which the girl wading on the beach seemed to us poorly spaced, the figure being too near the side to which the model faced. His other print, a marine with the setting sun, was full of atmosphere. E. B. Sides proved his versatility by exhibiting one landscape which showed excellent spacing and handling, the subject being a bridge over a river; a delicate, luminous study of birches on the bank of a body of water; two monks seated on a garden bench, and a genre group of boys which was particularly well done. F. Austin Lidbury maintained his high reputation with 4 entries. His two landscapes were remarkably fine in their rendering of planes. He showed also two winter river-scenes, one with snow and the other with bare ground and snow in patches; the treatment, however, preventing any "spotty" effect. The Porterfield Studio (W. H. Porterfield) exhibited 5. The marine-study of a yacht sailing out of the picture to the left was daring in spacing, but satisfactory, except that the values seemed to us unduly lowered. Another marine, in which the bow of a small sailboat with a man standing on the deck was the principal object, was better, the handling of other boats in the background being particularly fine, as less discriminating focusing and printing would have injured the pictorial quality. Porterfield often succeeds with subjects which others botch, as proved by a landscape of tall trees with a cloudy sky. There were also a sunset of beautiful quality and a color-print in gum, but the latter lacked conviction. Charles Boose displayed a green landscape with a stream—rather granular in texture, a study of marshland, and a splendid picture of two saplings.

The Boston Photo-Clan had an interesting group of prints. Garo's seven contributions in the Clan-show, apart from his four in the regular professional class, astonished those who are not personally familiar with his versatility as an artist with pigments and brushes. Those who thought he confines himself to portraits were delighted to find that he is also a landscapist of distinction. His *chef d'œuvre*, a multiple-gum of "The Old Mause," was said by many visitors to be the gem of the entire exhibition. Certainly no other three-color gum which we have seen has approached it in beauty. Many refused to believe that it is a photographic print. Geo. W. Harris, president P. A. of A., offered Garo \$500 for the print, but the offer was refused. Wm. H. Kunz had five 11 x 14's in carbon, oil, and bromoil. They maintained his reputation as a pictorialist of great power. F. R. Fraprie was unfortunately unable to exhibit with the Clan. His four bromides in the Boston Camera Club show were greatly admired. Dr. Miller had four 10 x 12's; a sepia Platinotype, a toned bromide, and two Clanoils. Dr. Warner showed four fine landscapes in Clanoil. Dr. Shuman had eight Clanoils, four of which were extremely original in composition and color. All of his work is straight photography and distinguished by careful study of values. Heinrich Eichheim, a new member, had time to prepare only two prints, one of which was pronounced by some of the biggest men present equal, in their opinion, to a Corot. It was arranged to ship the Clan-exhibit, after the convention, to Portland, Maine, where it is to be hung in the Art-Museum under the auspices of the Portland Camera Club.

Goldensky surpassed all expectations. His twenty-two gums again demonstrated that he is the leading "gunnist" in America. Some of his effects would make even the greatest enemies of gum-printing admit that their judgment was founded on inspection of poor specimens. The criticism that the controlled pigment-

processes 'accept the detail-drawing of the lens and destroy all the delicate gradations of highlight, shadings and shadow' does not apply to Goldensky's work, for he gets a wonderful range of tones; and, at the same time, the values strike one as particularly just. It is hard to select from twenty-two masterpieces any for special notice, and space forbids a complete review; however, we may mention the wholly artistic and idealistic nudes, of which there were several. A very large torso occupied the center of the row and smaller ones flanked it. A red-chalk of two girls kneeling and bending was really wonderful in composition, flesh-values, and mystery. Perhaps there is no one who can surpass Goldensky in the posing of two figures. We noted that his arrangements are logical and convincing. His portraits, too, depart from conventional arrangements and thereby express the artistic conception of the photographer. The portrait of C. H. Claudy, which is reproduced in this issue, was there too.

A. Allyn Bishop, who carried off the prize three years in succession, had five prints which went ahead of his former high standard. We had a spirited discussion regarding the trimming of one of his pictures and hope to reproduce it for the benefit of our readers.

H. J. Seelye of Bridgeport exhibited a frame labeled, "Is it a photo?" The spectators were divided, some maintaining that it was a real lace-handkerchief, others that it was a photographic print.

I. E. Hori, New York City, exhibited a portrait-head in color — a strange, haunting, puzzling face.

Robert Duane Haley showed two fine portraits of a painter at the easel.

Geo. E. Tingley, Mystic, Conn., had landscapes instead of marines this year, two of them with sheep. They were very fine.

H. H. Langill, Hanover, N. H., gave a varied exhibit of views, including a remarkable photograph of a rainbow and one of Haley's (not Haley's) comet.

Jared Gardner, Rockland, Mass., had five good things, one of which we hope to secure for reproduction.

F. A. Frizzell, Rochester, Mass., exhibited four fine home-portraits and home-groups.

Gerry's Studio, Sanford, Maine, out of three prints shown, had one which was remarkably good in pose and lighting.

Pirie Macdonald, New York, exhibited four of his famous portraits of men, fully up to his highest achievements.

Knauff & Bro., Knoxville, Tenn., showed two choice pictures, one of them a mother and child of splendid quality.

William Shewell Ellis, Philadelphia, exhibited three, the one of the ballet-girl being original and striking in pose and treatment.

Towles Studio, Washington, D. C., showed six, one of which we hope soon to reproduce.

Donnelley Studio, New Haven, succeeded in getting a portrait of a lady leaning back in a great armchair without distortion or false perspective.

R. T. Doone, Philadelphia, out of six had four of great merit and originality.

W. B. Davidson, Narragansett, Pier, R. I., has made great progress. We have been following his work with a soft-focus lens, but he has showed us nothing so good as the prints he prepared for the convention. He had a splendid wood-interior of tree-trunks in heavy shadow relieved against an open ride splashed with sunlight, a fine sand-tune with well-placed figures, and a study of a woodland pool — all of them of great artistic feeling.

The exhibits of the following were all of high quality: Bushong Studio, Worcester, Mass.; Melville W. Sykes, Chicago; Frank Scott Clark, Detroit; Hallis

Wilson, Berlin, N. H.; A. L. Bowersox, Dayton, Ohio; J. P. Haley, Bridgeport, Conn.; Cochran Studio, Bridgeport; Barrows Studio, Medford, Mass.; Chandler Studio, St. Albans, Vt.; Chas. A. Altman, New Haven; Dudley Hoyt, New York; F. Gutekunst, Philadelphia; Powers Studio, Claremont, N. H.; John Inglis, New York; Miss Reineke, Kansas City, Mo.; J. C. Strauss, St. Louis; Morris Burke Parkinson, Boston; Noetzel Studio, Newton Centre, Mass.; E. B. Core, New York; Harris and Ewing, Washington, D. C., and many others.

Summing up, we may say that the exhibition was extremely good and remarkably high in quality. The prevalence of home-portraits and three-quarter lengths was noticeable, also the predominance of sepia platinum. Very few large heads were shown, but many workers chose a half-length and made large sizes.

The color-photographs were very uneven. Wm. Starr of Bridgeport exhibited five, of which two were excellent. One of them was a road with a maple loaded with bright-yellow foliage. The other was an apple-tree in bloom by an old wall. His other pictures were of subjects having too strong contrasts to make successful color-pictures. R. J. Wynkoop of the Photographers' Club of Bridgeport had an excellent autumn-picture. Frances Johnson showed outdoor-portraits in which the subjects were posed in the shade against a sunlit background, and of course the highlights were overtimed. Her best picture, that of a woman and a little girl picking apple-blossoms, was excellent in the rendering of golden sunlight on the white gowns, but marred by blurring of the faces. Colonel Marceau was represented by four portraits beautifully mounted in gilded diascopes. They were excellent examples, though perhaps quieter schemes of color in some would have allowed greater prominence to the sitter's countenance. There was also a machine for viewing 5 x 7 autochromes, but we got no information concerning it, and it was out of order when we visited the color-section.

With the Manufacturers and Dealers

ABEL'S Publications were represented by Juan C. Abel, who received many congratulations on his recovery from his recent illness.

American Photography was represented by F. R. Fraprie.

The Camera and Bulletin of Photography were well cared for by Frank V. Chambers and Miss Bessie Blake.

The Photographic News was cared for by Miss T. Straub and R. D. Haley. They had on sale A. J. Anderson's "Artistic Side of Photography," and did a good business. Carl Ackerman looked in at the table occasionally, but he had his hands full as director of publicity and marshal of the day. Thomas Bedding, F. R. P. S., was present on Thursday. He is associated with Mr. Ackerman on the News.

PHOTO-ERA had a table in charge of Miss Helen R. Devlin, who distributed copies of the August issue. Both editors were present.

Tennant and Ward, 122 East 25th St., New York City, The Photo-Miniature and a new series of photographic handbooks, was represented by Edward Rock.

Wilson's Photographic Magazine, 122 East 25th St., New York City, was represented by T. Dixon Tennant.

Anco Company, Binghamton, N. Y. — W. B. Musen, manager New York office; F. N. Leache, W. R. Leache, J. A. Doherty, John D. Rice, Fred C. Muller, G. W. Topliffe, general manager, and A. B. Cross — showed a complete line of Cyko papers, illustrated by a superb collection of prints from prominent studios which charge top-prices for Cyko. Great prominence was given to the popular linen-surface paper in white and also colored by hand.

Artex Photo-Paper Company, Columbus, Ohio—G. H. Harkrader, sales-manager—had on view a collection of prints on the five different grades of its new paper, which is of the slow-exposure and soft-working type. The quality of the exhibit spoke volumes for the excellence of the product.

Bausch and Lomb Optical Company, Rochester, N. Y.—A. K. Hanks, representing New York and New England—showed the Portrait Unar lens in several sizes, also the I c Tessar, F/4.5. The booth was decorated with attractive photographs and enlargements made with these lenses from such workers as Edean, New York and Pittsburg, who makes only 11 x 14 home-ports with the 15-inch Unar; Belle Johnston, Lipincott and Garo. The new models of the Baloception for both transparent and opaque projection were also shown. Mr. Hanks distributed catalogs and copies of the new booklet, "What Lens Shall I Buy?"—mentioned elsewhere in this issue.

Berlin Aniline Works, New York. American agents for the Actien-Gesellschaft fuer Anilin-fabrication (the "Agfa" line)—F. R. Barrows, manager photographic department—had displayed a full line of Agfa chemicals, Metol, Rodinal, etc., also the Agfa Flashlamp and Blitzlicht powder. Copies of the Agfa Book of Photographic Formulae and the Agfa Flashlight Book were given out.

Bridges Manufacturing Company, Rochester, N. Y.—Grant Wilson—had a full line of attractive, up-to-date and high-class mounts and folders in many styles. The souvenir was a large appointment book for registering sittings from August, 1911, to July, 1912. It was eagerly sought by many studio-proprietors, and Mr. Wilson was kept busy booking orders.

Central Dry-Plate Company, St. Louis, Mo.—Lon Morris, vice-president and general manager; George T. Bassett, sales-manager; Floyd Whipple, manager Chicago branch; Will Murphy, manager New York branch; J. L. Lewis and Charles Henning—had a fine display of pictures from negatives on Central plates by Marceau, Gerhard Sisters, Theodore Edean, R. A. Nelson, Jarvis Weed, Gehrig and others; also a number of fine negatives illuminated by electric light. Two souvenirs were given out—a large celluloid Central button, about the size of a bread-and-butter plate, and a mirror of the same size mounted in celluloid.

Clark and Freed, 4 E. 8th St., New York City.—F. S. Fox—showed bromide and carbon enlargements, both portrait and commercial. The display was an excellent one, well representing the firm's ability to handle large work.

A. M. Collins Manufacturing Company, Philadelphia, Pa.—H. A. Stone, S. C. Wright and J. Kim—displayed a full line of the famous Collins mounts and folders from the model factory. Many of the styles were very artistic and attractive.

E. B. Core had in connection with the Cramer exhibit a new device for tank-development, consisting of a japanned metal frame for holding the plate. The tank is open, and the plate-holders are provided with a rod at the top which is longer than the tank and with grooves to hold the plate. The device allows each plate to be lifted for inspection without wetting the fingers, thus permitting individual treatment in development. If desired, all operations, including drying, may be completed without removing the plates from the holders.

G. Cramer Dry-Plate Company, St. Louis, Mo.—"Pa" and "Ma" Cramer; E. D. Wright, manager New York office; R. P. Brackett; Stewart Carrick—showed a fine exhibit of portraits from regular users of Cramer plates, including Garo, Goldensky, Dudley Hoyt, J. C. Strauss, Spellman, Edmonson, H. H. Pierce,

Ryland W. Phillips, Frank Scott Clark, Schervée, Curtis Studios and others. At the rear of their space was a large frame containing negatives illuminated by electric light from famous studios.

Frank J. Curry, 902 Filbert St., Philadelphia, Pa.—Frank J. Curry, W. F. Thode and R. L. McConaghy—had a novelty in the shape of a light, compact and extremely rigid collapsible camera-stand for home-portraiture. The device is very well designed and constructed and should be very popular with amateurs, as well as with professionals. They are agents also for E. B. Core's tank-plate-racks.

Defender Photo-Supply Company, Rochester, N. Y.—Frank Wilmot, president; R. W. Palmer, advertising-manager; R. L. Ennis, manager Boston office; J. G. Gallagher, manager New York office; Wm. Palmer, manager Pittsburg office; C. L. Jackson, Fred Niemeyer and Carl Keller—was out in force with Argo gaslight-paper, Triple A and Monox bromide. The new Vulcan film, also Vulcan, Defender Ortho and Defender Non-Halation Ortho, were represented. The display of prints on the Defender papers was large and fine. The souvenir was a folding orange lamp to enclose an electric bulb.

G. M. Dye Printing-Machine Company, Inc., 709 S. 5th St., Minneapolis, Minn.—C. Frederick Potter, Jr., president; F. W. Loomis; G. E. Carr—showed the Photo-Autopress. This ingenious machine is a mechanical photographic printing-press. It runs by electric motor and automatically handles the paper. The negative is held in a vertical position and the paper brought into contact with it by a mechanically-operated pressure-back after being fed by the machine, and automatically disposed of after exposure. Very rapid printing is the great feature of the press, combined with absolutely accurate and uniform timing of the prints. The device is to the finisher what the cylinder-press is to a newspaper. It is made in 8 x 10, 11 x 14 and "special" for postcards, with a tank-development system.

Eastman Kodak Company, Rochester, N. Y., was very fully represented by C. F. Ames, general sales-manager; A. H. Paul, assistant sales-manager; F. S. Noble, assistant treasurer; L. B. Jones, advertising-manager; Spencer B. Hord, assistant advertising-manager; H. M. Fell, special convention-manager. The papers were cared for by Joseph Di Nunzio, chief of the platinum division; M. A. Yauch, Artura; E. J. Arthur, H. L. Austin, F. L. Andrews, Charles Nelson, H. F. Arnold, H. E. Niles, Charles R. Leake, C. S. Rabineau, Jr., and R. Barbeau. The plates were represented by J. B. Guthrie, J. C. Neely, H. A. Collings, J. H. C. Evanoff, George M. Bolton, Charles Hutchinson and Walter Bent. H. C. Fincke and Paul Favour looked out for the interests of the professional apparatus made by the Folmer and Schwing and the Century Divisions.

A large screen occupied the center of the hall and displayed many fine prints on the various Eastman papers, including Etching Black, Etching Sepia, American Platinum, Artura, Azo and Velox. Many of the pictures were from negatives by prominent photographers. The latest novelty is the Artura-method for sepias, depending on a hypo-alum bath containing chloride of gold. The color is wonderfully clean and brilliant, with great transparency in the shadows, and the tones are uniform as long as the bath is kept at a constant temperature. A folder containing a sample print and giving the formula was distributed. The new Azo hypo-alum formula was also demonstrated.

The M. A. Seed Dry-Plate Division showed a large frame containing 54 transparencies and negatives on Seed plates, including some made at St. Paul by Rudolf Duehrkoop, and others from Dudley Hoyt, W. S. Lively and James Arthur. The beautiful chemical effect of

these specimens called forth much favorable comment. The 30 x 60 carbon prints from negatives on Seed plates, by W. S. Lively of the Southern School of Photography, were in the picture-exhibit.

C. P. Goetz, American Optical Company — F. Schmid, manager — showed the well-known Dagor, Celor and Syntor lenses. A most interesting feature of the exhibit was a case containing specimens of lenses, mounts, etc., in all stages of manufacture. The other Goetz specialties were represented and a fine lot of prints was on view. Remarkably fine 16 x 20 enlargements from Vest-Pocket Tenax negatives attracted much attention. The early comers were fortunate enough to secure one of the celluloid folding pocket rules as given at the St. Paul convention.

Hall Camera Company, 14-18 Dumban Place, Brooklyn, N. Y. — A. L. Brown, secretary — had a space for the demonstration of the Hall Mirror Cameras. These are of the reflecting type, with focal-plane shutters, and are made in sizes from 2 1/4 x 4 1/4 to 5 x 7, at extremely low prices. An album of specimen prints was displayed.

Haloid Photo-Paper Company, Rochester, N. Y. — C. H. Daws, manager New York office; R. J. Wilson, sales-manager — showed the seven surfaces of the new Haloid Extra papers, of which grade A is single-weight. The fine quality of the paper was well shown by both contact-prints and enlargements, black and white and sepia. A number of portraits finished in oils were included in the show. Neat, rubber-tipped combination pen-and-pencil souvenirs were distributed.

Hammer Dry-Plate Company, St. Louis, Mo. — L. F. Hammer, Jr., and Clinton Schafer — had a booth filled with prints from Will H. Towles, Gerhardt Sisters, E. E. Doty, Hubert Brothers, Mary Carnell and many others. The well-known high quality of the plates was upheld by the display of work. Little gilt hammers were the souvenirs.

Ralph Harris & Co., 26-30 Bromfield St., Boston, and 108 Fulton St., New York City — Ralph Harris, senior partner, and E. F. Keller, manager New York office — displayed the Wellington papers and plates for which the firm is sole U. S. Agent. The souvenir was the attractive Wellington calendar with a print on Cream Crayon Smooth (toned) of two kittens singing "Meet me by moonlight alone." The unsurpassed quality of the Wellington Bromide papers for enlarging was well demonstrated. The Negaphase erasing-pencils, as a substitute for the etching-knife, attracted much attention. Euryplan lenses, for which the firm is U. S. Agent, and Reflex Cameras, for which it is N. E. Agent, were also represented. The portrait of Garo, by Kutz, from our September issue, was given as a souvenir, beautifully printed on Wellington Cream Crayon Bromide.

Secretary George H. Hastings showed his card-index system by his representative, H. W. Benson. The card covers every detail of the handling of a studio-portrait order.

John Haworth Company, 1020 Chestnut St., Philadelphia, Pa. — Roger Kirk and Albert Wunderlich, as Eastern representatives of the Seavey Company of Chicago — showed the Seavey Window-Accessory for window, mantel- and firelight-effects. This is a first-rate device for use in the studio for "home-portraiture," Thomas F. Howe, treasurer of the Seavey Company, was also present.

W. S. Lively, McMinnville, Tenn., was present to tell enquirers about his Southern School of Photography. Everybody had a cordial greeting for "Daddy" Lively, and his immense carbon prints, 20 x 60 inches, in the picture-show, were the subject of much favorable criticism. Mention of them will be found elsewhere in this issue.

McIntire Photo Supply Company, Inc., South Bend, Ind., was represented by the Eastern Distributor, the Magnet Photo-Materials Company, of Boston. A good showing of sepia-in-first-development was made. Ucatone papers, developers, printing-machines and developing-machines are described in the literature given out.

Magnet Photo-Materials Co., 5 Bromfield St., Boston — C. O. Lovell, manager; Ray H. Barrows, manager Boston office — bad prints galore from Colo-Non, Magnet Ortho and plain Magnet plates. The Colo-Non is a strictly double-coated plate having an undercoating ten times slower than the upper coating and sensitive to the orange. Some extremely fine views with full values in clouds and foregrounds without a screen were on view. Most of the portraits shown were on the Magnet xxx, the special studio plate.

Multispeed Shutter Company, 317 E. 34th St., New York City — G. Dietz, general manager; A. H. Hotte, advertising- and sales-manager — had on view all the sizes and varieties of the high-speed shutters made by them. Mr. Dietz demonstrated the new flashlight attachment by means of which exposures of 1/400 second were given. On Thursday night he photographed the parade of the fire- and police-departments from the Hotel Stratfield. Mr. Dietz had the only darkroom on the island, and, as the editor forgot to bring his changing-bag, courteously extended to him the use of it for reloading his plate-holders.

George Murphy, Inc., 57 E. 9th St., New York City — J. G. Lavender, treasurer; L. H. Bunker; Harold Kuhn — demonstrated a great many of the specialties sold under its "Eagle" trademark, such as the Eagle backgrounds, flash-lamp-outfit, developing-tanks and embossing-press. A full line of the famous Ross Homocentric lenses, which are asserted to be the only ones completely corrected for zonal aberration; the Autotype carbon-tissues; Lande's Enlarging-lantern with parabolic reflector for use without condensers; the Percy King Light-controller; the Royal Foreground Ray-screen; the O. K. Lamps; Probus Preservative Paint and some fine Dufay Dioptrichrome transparencies were displayed. The show was the finest and most complete ever made by the firm.

Ernst Oeser & Company, Berlin, Germany, and 32 Union Sq., New York City, was represented by E. A. Laver, manager, and I. Nacht, sales-manager. A good line of the highest-class imported mounts and folders in many attractive styles was the feature of the company's display.

B. Oshrin & Brother, 390 W. Broadway, New York City, was represented by Max Friedenberg and exhibited a great variety of mounts.

R. S. Peck & Company, Hartford, Conn., represented by E. O. Wagner, showed a general line of attractive mounts and folders.

Pinkham & Smith Company, 288 Boylston St., Boston, was represented by H. M. Seaver. The firm is the largest independent house in New England and carries complete stocks of all amateur and professional supplies, including Central plates, for which it is New England distributor.

Presto Manufacturing Company, Pittsburg, Pa. — C. J. Powell, sales-agent; H. F. Dutcher — displayed a fine collection of prints made with the Infallible Tinting-Masks. These are two- or three-tint plates on ground-glass and give tinted borders with the minimum of trouble for either contact-printing or enlarging.

Robey-French Company, 34 Bromfield St., Boston, Mass., was represented by H. D. Haight, general manager; Fred Q. Avery and George A. McLoughlin, and incidentally was assisted on the professional apparatus by Messrs. Paul Favour and H. C. Fincke, of the Eastman Company. As befits the largest stockhouse of the East, the company had a magnificent and complete display of

everything of interest to the professional from cameras and accessories to backgrounds and mounts. If any class of goods was not shown, the omission escaped our notice. This one firm's showing was a liberal education. A new and interesting specialty put forward by Robey-French — W. A. Sands, demonstrator — is Photo-Flat, a solution which is brushed over the backs of unmounted prints and prevents them from curling. A 4-ounce bottle costs only 35 cents.

Rotograph Photo-Paper Company, 125 S. 2d St., Philadelphia, Pa., was represented by Max Adler. 14 grades and 10 surfaces of Rotograph Bromide were explained and exhibited; also negative-paper, particularly thin and structureless and suitable for enlarged paper-negatives, of which several of large size were on view. The Rotograph product seems fully up to the old standard set by the German house when the paper was first introduced into this country some years ago.

Rough & Caldwell Company, 140th St. and Walton Ave., New York City, was represented by T. G. Caldwell. He had a very large display of grounds and accessories, among which we noted particularly a useful combined bay-window-accessory and seat, a "marble" seat finished in a hard, durable coating, and Tape-stroid grounds in sepia on flexible cloth for folding up and carrying to the houses of patrons for home-portraiture.

Schering & Glatz, 150 Maiden Lane, New York City — S. W. Nourse, traveling sales-manager; Mrs. Nourse, and August Stiefel — had the full line of Schering photographic chemicals — crystal and resublimed pyro, Satrapol, Nerol, Citol, Duratol, Glycin, Satrap Varitone Tablets, sodas, etc. Mr. and Mrs. Nourse were kept busy handing out samples and literature.

Seneca Camera-Manufacturing Company, Rochester, N. Y. — F. K. Townsend, secretary and treasurer; Louis W. Weil, sales-manager — had a full line of Seneca Cameras and sundries. The Camera-City View and the New Improved Seneca View drew the attention of the "outside" men. The Simplex plate-holder was the subject of much favorable comment. Both Messrs. Townsend and Weil were kept busy all the time showing their goods. Considerable excitement in the company's booth was caused the first day by the mysterious disappearance of an expensive 4 x 5 hand-camera and two plate-holders. Two days afterwards all was returned in perfect condition as surreptitiously as it had been removed. The user showed good taste.

Taprell, Loomis & Co., Chicago, Ill. — W. A. Taprell and J. A. Cameron — had a large showing of mounts. Some very pleasing calendar-mounts and some new ideas in folders were particularly pleasing.

The Taylor-Hobson Company, 1135 Broadway, New York City, had desk-room only. Mr. L. L. Kellsey was on hand to explain how Cooke lenses differ from others and why they are superior. Unfortunately or fortunately, Mr. Kellsey was unable to display a full line of lenses, because the great increase of sales has severely taxed the capacity of the factory at Leicester, England, and the Cooke people refuse to rush work at the expense of perfect quality. Mr. Ronald Taylor, who is now in England, writes that the factory-capacity and the working-force have been greatly increased, so that back orders will soon be filled. Mr. Kellsey had as souvenirs the remarkable picture of the Metropolitan Life Building, which we reproduced last fall.

The Towles-Schofield Company, Inc., Evans Building, Washington, D. C. — Will H. Towles, president; G. R. Cowie, secretary and general manager — showed the new Towles-Schofield Smokeless Automatic Flashlight-Machine. Owing to an error in our September number, it was stated that this machine is connected with a pipe to carry the smoke away. This is not the case: the ma-

chine consumes its own smoke and is provided with a smoke-reducer, turning the handle of which removes all products of combustion from the hood. It loads with twelve cartridges and is fired by electric current. Mr. Towles and W. S. Lively special demonstrator, made some very fine portraits at the convention and showed prints which proved that any lighting, with good values, may be easily made with the device. A special demonstration was given by "Daddy" Lively in the Auditorium immediately after the business meeting on Thursday. As a result, lamps were sold to such men as Geo. W. Harris, president P. A. of A., Morris Burke Parkinson, Eugene F. Gray, Edmonson, I. and M. Strinberg, F. A. Frizell, G. H. Walters, W. E. Marshall and others.

Willis & Clements, 1814 Chestnut St., Philadelphia, Pa., represented by W. J. Markley, showed prints on all grades of Platinotype papers. The ordinary black and white papers are furnished in 6 grades, the sepia in 6, the Japine black in 1 and the Sepia Japine in 3, including a buff stock. A good Platinotype remains unrivaled as the finest print possible to make, and Willis and Clements have an enviable reputation for quality and uniformity of product.

Willoughby and a Square Deal, 814 Broadway, New York City, had the table next to PHOTO-ERA's and was represented by R. Hastings. Catalog 111 and bargain-list 122 were given to all who applied.

Wollensak Optical Company, Rochester, N. Y., had only H. Oliver Bodine, Manager Department for Promotion of Trade, but Mr. Bodine is a host in himself and worked like a beaver. The Wollensak space was surrounded by a crowd eager to learn about the new Verito F/5 ("True to Life") soft-focus or pictorial lens. The sample prints shown were very beautiful, the quality of the drawing being unmarred by halo, run-around, double-image or blur, yet the softness was such that no skin-defects were in evidence. Up to Thursday night, 9 Verito lenses were sold. "The Photographic Quartet" is the title of a booklet devoted to the Wollensak professional lenses — Vitax, Series A, Versar and Velostigmat. The new Series II, F/4.5 Velostigmat, with diffusing-device, seemed very popular. These lenses are elegantly finished in black enamel and fitted with between-the-lens silent studio-shutters. The regular Wollensak shutters have been improved, and all now have a mark "O," to which one sets the pointer to open the shutter for focusing without pressing the release. Mr. Bodine is particularly advocating the Skyshade shutter for pictorial landscape-photography — a branch of the art in which he is expert, as our readers know from reproductions of his prize-winning pictures in our monthly contests.

The Dealers' Dinner

The dinner of the Photographic Dealers' Association of New York was held at The Stratfield, Thursday evening, September 14. Carl Ackerman acted as toast-master. Addresses were made by J. H. Garo, president of the P. A. of N. E., Mayor Buckingham of Bridgeport, President Bennet of the P. D. A. of N. Y., Thomas Bedding, F. R. P. S. C. H. Huesgen, Geo. W. Harris, president P. A. of A., G. W. Topliff, of Anso Company, and J. P. Haley, vice-president P. A. of N. E. All the remarks made tended to show the benefits accruing to the members of the association, particularly in avoiding dealings with undesirable customers. Mr. Huesgen very strongly urged the formation of similar organization in every large city of the Union, and President Geo. W. Harris advocated that a national association of dealers be started at once, with the New York body as a nucleus. These suggestions were received with tremendous enthusiasm. About 100 were present.

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Photographic Notabilities at Bridgeport

Among the big men present we noted Clarence M. Hayes, Detroit, Mich.; Elias Goldensky and William H. Rau, Philadelphia, Pa.; E. E. Doty, Battle Creek, Mich.; Pirie MacDonald, B. J. Falk, E. B. Core, Dudley Hoyt, A. F. Bradley, Oliver Lippincott and Col. Theodore Marceau, New York City, Pres. George W. Harris, Washington, D. C., and F. Chester Bushong.

Other prominent lights present were Ben. Larimer, Marion, Ind., president-elect of the National Association, J. C. Strauss and Gustav ("Papa") Cramer, also Mrs. Cramer, St. Louis, Mo.; George Edmonson, Cleveland, Ohio; L. S. White of flashlight fame and Jacob Schloss, New York City; J. Will Kilmer; past presidents Charles W. Hearn and Morris Burke Parkinson, Boston, Mass.

W. P. Buchanan

The convention was shocked to learn that W. P. Buchanan of Philadelphia had been blown up while mixing a batch of flash-powder. Full details could not be had up to the time of going to press. Expressions of sorrow were many, for Mr. Buchanan had numerous friends on the grounds.

The Magic Scarf-pins

Owing to the vigilance of the police-force at the convention-grounds the light-fingered class were afforded no opportunities to practise their skill. And yet scarf-pins disappeared with a frequency that was alarming. No clue to the abstracter could be found. The lieutenant in charge only smiled whenever a victim appealed to him for aid. It then developed that the perpetrator was none other than the genial and nimble president of the National Association, George W. Harris, whose extraordinary prestidigitatorial dexterity has baffled the analysis of the most astute mind. Several times he removed the treasured scarf-pin from the Editor's four-in-hand, only to present it soon afterwards graciously and with a smile which at once dispelled the merest approach to anger or resentment.

The Group-Picture

The group-picture of the photographers was taken early Wednesday afternoon by H. J. Seeley of Bridgeport. He used the largest size of the Cirkut camera and produced a fine print 36 x 12 inches. The camera was mounted on the band-stand while Carl Ackerman, with a bugler, summoned all to attend.

A Bit of Repartee

Overhearing a conversation between some of the officers of the National Association, in the course of which one of them jokingly asked when the several-times postponed business-meeting was to be held, President Garo retorted that all the boys did at Saint Paul was to "draw a line through the country."

How the Associate Editor Stalled the Elevator

On Thursday evening, Carl Ackerman collected a large "bunch" of the boys for a special demonstration in the parlor upstairs. Although The Stratfield is provided with large elevators, the boys were mostly heavy-weights, and there were about twenty of them. Seeing that there seemed to be no room, the Asso. Ed. hesitated, particularly as Thomas Bedding, F.R.P.S., had just managed to squeeze in. Ackerman, however, insisted on his entering, and the elevator crept slowly upwards for four feet and then stopped. As repeated efforts failed to achieve a greater height, the pigmy who had caused the stoppage effected his escape on the ground floor. The others reached the heights in safety.

PHOTO-ERA

The American Journal of Photography

Vol. XXVII

NOVEMBER, 1911

No. 5

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Associate Editors, MALCOLM DEAN MILLER, A.B., M.D., ELIZABETH FLINT WADE

Contributions relating to photography in any and all of its branches are solicited and will receive our most careful consideration. While not accepting responsibility for unrequested manuscripts, we will endeavor to return them if not available, provided return-postage is enclosed.

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LA FONTAINE DES GIRONDINS, BORDEAUX
R. LINCOLN COCKS
LONDON SALON OF PHOTOGRAPHY



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Lantern-Slides Direct in the Camera

W. L. G. BENNETT

A YEAR or so ago I described a method by which a negative, enlarged or otherwise, could be made direct from another negative without the necessity of making an intermediate positive. It occurred to me at the time that the method would be applicable to making direct positives in the camera, but not thinking that there would often be any occasion to do this, I did not think it worth while to refer to the matter.

Quite recently, however, a friend told me that he was intending to make a number of lantern-slides from reproduced photographs in a Colonial journal, in order to illustrate his travels, and was bewailing the necessity of making a large number of negatives from which he would require to print only once.

It struck me at once that it might be possible to make the slides direct, in the afore-mentioned manner, and, after a few experiments, which were necessary in order to adapt the procedure to lantern-plates, I succeeded in producing slides showing all the detail and gradation of the originals.

Photographers wishing to make slides of botanical, natural history, or any other subjects, for lecture purposes, will often not require any paper prints, and be glad to save the time and expense of making so many negatives. It may, therefore, be of interest to readers if I give the exact data of first and second exposures, toning, etc., which will result in a good, clear slide.

For the benefit of those who do not remember the previous article, I may as well mention that the process consists in developing the image in the usual way, toning in with uranium, so as to substitute a deposit of this metal for the original one of silver; exposing to light, so as to print through this image an opposite one on the remainder of the sensitive film behind; developing this new image, and removing the old one. The new image, which is all that remains on the plate, will, therefore, be of the same value as the original, either positive or negative, as the case may be.

My first attempts, however, to make lantern-slides in this way were complete failures. The plates on which the experiments were made were of about the same rapidity as the rapid bromide paper which I had previously adopted for the direct enlarged negatives; therefore for the second exposure I gave what I had found by experience to be right for the latter, viz., four inches of magnesium ribbon at two feet distance.

This exposure had no effect at all, and, after several trials, I discovered the fact that when both were wet the lantern-plates were only about 1/30 of the speed of the bromide paper. Some readers will jump to the conclusion that my process will, therefore, involve burning about four yards of ribbon for each slide, yet we can obtain the same result by burning only two inches at a distance of four inches from the plate — an ample distance for so small a size.

This is the only real difference in the manipulations from those I described for the enlarged negatives, but for those who have never tried the process, I will briefly repeat.

The lantern-plates, which should be of a "rapid" brand, are loaded into the dark-slides of the camera, into which special carriers must be inserted for sizes over quarter-plate. Quarter-plate slides will usually hold the lantern-plates without a carrier. They should be fixed firmly at one end, with paper or card, and a line drawn on the focusing-screen, to show how far the plate comes, so as to be sure to include on it all that is desired.

The speed of the plates is usually given on the box, or can be found in exposure-meter lists, and, by comparison with that of the ordinary plates to which the worker is accustomed, no difficulty will be found in judging the exposure correctly.

The developer I recommend for both developments is amidol. I here give a convenient formula:

Sodium sulphite, anhydrous	3 dr.
Amidol	15 gr.
Potassium bromide	3 gr.
Water	5 oz.



BARTON BROAD

LONDON SALON OF PHOTOGRAPHY

F. J. MORTIMER

It will not keep good for more than about four days. I also give again the formula for the uranium toning-bath :

No. 1

Uranium nitrate	40 gr.
Glacial acetic acid	1/2 oz.
Water	10 oz.

No. 2

Potassium ferrieyanide	40 gr.
Glacial acetic acid	1/2 oz.
Water	10 oz.

Both these solutions will keep indefinitely by themselves. For use, mix equal parts of each just before required. The sulphocyanide bath, recommended for the paper, does not appear to be necessary for the plates.

The plate should be developed until detail is visible all over it, but it need not be continued so long as if it were going to be fixed and finished at once.

After development the plate must be rinsed in two or three changes of water for about two minutes, and then the uranium toning-bath is applied. Directly this has been poured over the plate, lift it out, hold it up to the red light, and carefully note the density of the darkest parts, and then return it to the toning-bath. If examined again in two or three minutes, the dark parts will appear much lighter, due to the substitution of the red uranium deposit, which looks light in tone by red illumination. With a little practice it will be easy to see when the original silver image has been entirely displaced.

This examination is not really necessary, as with fresh solution the action is certain to be complete in five minutes, or less.

Thorough toning is absolutely necessary. When this is judged to be the case, pour off the toning solution, and wash the plate thoroughly in three or four changes of water for two minutes or more.

For the exposure to the magnesium the plate must be removed from the dish unless the latter is made of dark-colored xylonite, or else the light will be reflected on to the back of the plate and cause a certain amount of fog. It is, therefore, best to lean it against a piece of black or dark-red paper, which, in its turn, should be propped up against some article on the table.

Having measured out two inches of magnesium ribbon, a match should be struck and the ribbon kindled, and held at about four or five inches distance from the plate. Then return the latter to the dish, and again pour on the developer.

Judging the time of development is the most difficult part of the process. If insufficient, the halftones will be fully out, but the shadows far too weak. If over-done, the slide may be foggy, but this is of less importance, as the fog may be cleared away by subsequent reduction.

It should be continued until the positive image looks strong and full of detail, when held up to a fairly bright red light, and the whole surface looks black by reflected light, the highlights being still blocked up by the negative uranium deposit. At least, this is the case with amidol,



IN THE THICK OF IT

LONDON SALON OF PHOTOGRAPHY

F. J. MORTIMER

but with rodinal the uranium may dissolve away at once, in which case development may be judged as when making a slide in the ordinary way.

Fixing is carried out as usual. I strongly advise not admitting white light until this is nearly completed.

When taken out into the light, the highlights will very likely be found to be red or yellow, owing to the uranium. Immersion in a solution of carbonate of soda of any strength will instantly remove this.

If the subject was one with average contrasts, and the first and second exposures and other details reasonably correct, the resulting slide should be clear and bright, and need no further alteration. Otherwise a certain amount of veiling of the highlights may be present.

If this is the case, make a solution of potassium ferriyanide, about quarter of an ounce in six ounces of water, and add a small quantity of this to some clean hypo fixing-bath, so as to make it a bright yellow color.

In this solution the slide will rapidly become lighter, and as soon as the strongest highlight has become clear glass, it should be quickly

removed and immediately thoroughly washed.

Uranium, copper, or sulphide toning may be carried out, if desired, as with any other slide.


The Amateur Photographer.

The Significance of Lines as Elements of Art-Expression

LINE has a distinct æsthetic value no less than one contributive to picture-mechanics. Thus pictures conceived in vertical lines bespeak dignity, solemnity, quietude; pillars, trees of straight shaft, ascending smoke and other vertical forms all voice these and allied emotions. With slightly less force does a series of horizontals affect us and with a kindred emotion. But when the line slants and ceases to support itself, or becomes curved, movement is suggested and another set of emotions is evoked. The diagonal typifies the quick-darting lightning. The vertical curved line is emblematic of the tongue of flame; the horizontal curve, of a gliding serpent. In the circle and the ellipse we feel the whirl and fascination of continuity. The linear impulse in composition therefore plays a part in emotional art independent of the subject itself.

Henry R. Poore.

**LONDON SALON
OF
PHOTOGRAPHY**



AT THE GALLERIES OF THE ROYAL WATER COLOUR SOCIETY
5^A PALL MALL EAST
LONDON, S.W.
SEPT. 9TH TO OCT. 21ST
Open 10 to 6. Admission ONE SHILLING.

A. H. BLAKE, M.A.

THE London Salon of Photography has just opened its second annual exhibition at the Galleries of the Royal Water Color Society, Pall Mall East, and it may be at once said that it marks in many ways an advance upon last year's show. In the first place, useful and convenient as the Fine Art Society's Gallery in Bond Street was, it was rather too small for so important a display; but this cannot be said of the present gallery, in which two hundred prints can be exhibited to advantage and which, being associated for so many years with advance in pictorial photography, is familiar to all interested in the subject. The severe restrictions placed last year upon numbers has not therefore been necessary and the result is a notable display of English and foreign work. The recent redecoration of the gallery is now seen by the public for the first time and adds to the effectiveness of the display. The London Salon this year is more widely supported. It was a new venture last year and the photographic public hardly knew how to take it, but after they had seen the first exhibition it was only natural that a much larger amount of general support should be forthcoming. Altogether some two hundred and twenty pictures are accepted and

the work is varied in character, catholic in taste, and certainly of a high order of excellence. It cannot be said, either, that the members of the committee are mere faddists wedded to one class of work only, or that they form a mutual-admiration-society merely interested in the display of their own (supposed) perfect productions.

Many of the old Salon names will be found in evidence as soon as we begin to look round the pictures on the walls. Mrs. Cadby is represented by one of her animal-studies in which a natural and easy pose has been captured in "The Pup." Rudolph Eickemeyer, amongst other smaller works, has impressive misty summer sunshine in "A Summer Landscape," while Will Cadby has his usual fine gray and white tones in "A Winter Landscape." Mrs. Barton is well represented and makes in one case at least a notable advance. "The Ambassador" is a strong piece of lighting, while in "Hist! Said Kate" we have an effective use made of a stained-glass window as a background. Her finest picture is "A Lady in Black." This is a portrait of fine quality, with excellent tone-rendering and easy, pleasant pose. It moreover shows that she is not bound to one style and treatment but has the gift of freshness and has



THE ONRUSH OF A MIGHTY SEA

F. J. NORTIMER



A SPLASH OF SUNLIGHT
R. M. COCKS
LONDON SALON OF
PHOTOGRAPHY

not ceased her original seeing. Frederick Evans shows one of his typical architectural studies of "Chartres." F. J. Mortimer shows a surprising versatility and variety of outlook and treatment this year, not only eclipsing himself in his large sea-piece, "In the Thick of It," which is a piece of effective realism unsurpassed, but also showing nature in gentle mood in "Barton Broad," with its delightful gray tones with just the one white note of the boat-sail to give point to the whole. This was not a mere chance shot but the deliberate result of patient waiting for the exact thing sought. He has one or two imaginative pictures, such as "On a Day in June" in which effective use has been made of suppression of focus to give mystery and suggestiveness. Certainly, "In the Thick of It" will be considered the best sea-picture he has yet produced. The two Cockses keep the position they won last year. R. M.

Cocks, in "A Splash of Sunlight," has one of those Eastern subjects which helped to make his name; and, as my readers will see, it is a piece of effective and vigorous lighting. One of the most impressive works in the exhibition comes from Mr. Lincoln Cocks and is here reproduced. "La Fontaine des Girondins" is the enlargement of a small portion of a well-known fountain, but the point of view is admirably chosen, the lighting effective, and the whole in the large size in which it is displayed tells with surprising force upon the walls. The small reproduction can hardly give any idea of the force of the subject when seen large. France is to the front in the person of Pierre Dubreuil, who surpasses himself this year. The variety of subject, the force of presentation, the sense of decorative treatment are all exhibited in a high degree, though no good example is available to send.

THE TUDOR DRESS
BERTRAM PARK
LONDON SALON OF
PHOTOGRAPHY



Bertram Park is a man who consistently continues his advance, and the portrait here given, "The Tudor Dress," is dignified and telling in composition and is, I believe, the favorite of the artist himself, though perhaps one would give the palm this year to his "Study in Light Tones," which is a nude of great quality and restraint. It is one of the very few nudes that completely commends itself to one's taste and feeling. One had almost despaired of getting anything in the nude by photography except nakedness until Mr. Park gives us this version of a female figure disposed with graceful lines upon white draperies. The work of E. G. Boone will be familiar to most American photographers. In this exhibition we have several examples of his excursions into sunlight-renderings and his skilful treatment and delicacy of handling are accorded favorable recognition by

critics. I do not think he shows any particular advance but he well maintains the high reputation previously won. Alexander Keighly is a household word in America, as here. He is represented by three landscapes which have the old charm. Perhaps the most effective is "The Shepherd" which is, somehow, though the material is not very similar, reminiscent of that old favorite known to every photographer, "A Picardy Pastoral." David Kay is as good this year as last, and that is saying a good deal. In some of his more important efforts he gets the quality and dignity which characterize the photographic work of Craig Auman. He is very happy in an effect of sunlight which is called "Building at Winchester" — a strong effect of warm sunlight.

But it is time that I said something about the American work. The Photo-Pictorialists of Buffalo are to the front. G. Edwin Keller in his

THE APPROACH OF EVENING

LONDON SALON OF PHOTOGRAPHY

WILLIAM H. KUNZ



picture, "Morning," shows broad treatment. He adopts a high horizon-line and gives it a strong point of interest to concentrate his effect. Yarnall Abbott has several good things, such as "The Dark Staircase," which is well concentrated and has much mystery and impressiveness; but to my taste "The Egyptian Dancer" is his strongest subject. It so completely carries out the idea of the title that it might be a piece out of an old papyrus. It could not have been easy to find so suitable a model and to get the flatness of tone which so helps the subject. The color, too, is suitable and helpful. Pirie Macdonald has a strong and forcible man-portrait. W. H. Porterfield sent some excellent work. He gives us an impression in his "Passing in Review" of one of those summer days in which "the clouds in fleets" pass over the field of the heavens from morning till night. "After the Sail" is a study of reflections, a high horizon point is taken and the white sails of the boat that has just been berthed are reflected in the rippling water. The light on the sail and its reflection is well done and duly concentrated in interest, which is not generally the case in subjects of this kind. He also gives us "The Gorge of Niagara" in a picture in which the charm and mystery of night are well expressed. Edmund B. Sides also tackles "Niagara," representing rather the effect of the turgid broken water below the falls and making play with the designs given by the foam on the water and its currents as helps to design, the whole thrown back into proper distance by a dark overspreading branch. Austin Liddbury was busy with camera in London and sent us back an impressive rendering of "The Sphinx"; it is moreover original, which is saying a good deal for so hackneyed a subject. W. and G. Parrish have three pictures hung. "In the Hospital" is a very sympathetic rendering of the subject, with delightful tones. "Desolated" is marked by intense feeling and well carries out the title. Again the fine gray tones are noticeable. "Nestlings" is perhaps the gem of the three. It is a delightful baby-study with again, for the third time, exceedingly fine tones. Oscar C. Anthony sends us "Morning Shadows," a delightful rendering of sun and shade helped by judicious focusing. F. Bruguere has a picture hung called "Santa Barbara" which is broad work with effective composition and excellent light and shade. Arthur Hammond's children are quite delightful, decorative in arrangement and technically perfect. Mrs. Hayden shows two pictures, "Sermon-Time" and "A Drink," both well arranged and telling the story successfully. R. S. Kauffman has a study of work-people in the field called "The Road through the Field,"

which is excellent; but we are spoiled for it by the remembrance of the amazingly fine subject of the same kind which he sent a few Salons ago. Wm. H. Kunz in "The Approach of Evening" has the subject-mass well arranged and treated.

I should be doing injustice to our English workers did I not mention the excellent work contributed by Harold Crawford, who, though he has produced pictures before, has never given evidence of the power here shown. In "The Pageant" we have an original conception and effective arrangement. We are supposed to be with the spectators in the stand. Below are seen the mass of the audience broken here and there by the woodwork of the stand, while away in the distance the figures are working out a scene in the pageant. It is here that the skill comes in, for the exact moment has been waited for when the figures would not be a mere uninteresting mass but make some sort of pattern for the eye. In "The Cricket-Match" he makes effective use of the dark figures of the spectators to throw back the lighted figures of the players. Space does not permit me to speak of the pictures contributed by the foreign members of the London Salon and others from the Continent. At a guess, I should say that it comprises about one-third of the show and is of fine quality.

I certainly think that it can be said without exaggeration that the London Salon of Photography has done a very good work in gathering together an exhibition like this to show some of the best English and foreign work. There is no other photographic exhibition this autumn in London, and otherwise the work which the summer (a record summer for sun and shine with us) produced would have had to wait. Every one has had a chance to get hung without fear or favor, the committee do not hang their own work to the exclusion of that of the public and they are catholic enough to hang work of all schools of thought.

A work of praise and appreciation is due for the poster. Not only has Mr. Bertram Park shown us what he can do upon the walls of the exhibition, but his work, as a poster-designer, is spread broadcast upon the hoardings and upon the boards of the sandwich-men all over London. It is one of the most effective posters ever seen.

One thing should emerge, and that is that American photographers, realizing that this exhibition has come to stay and to be a potent force for good in advancing the interests of pictorial photography all the world over, should get ready plenty of work against another year. America has strong and interesting work in this exhibition, but we want to see a lot more of it another year.

Color-Values in Portraiture

PAUL L. ANDERSON

THE present writer recently received from the editor of this magazine a letter stating that the tendency of modern photography is to represent the tone- (i.e., *color*) values in the human face as accurately as possible; that in order to attain this result the complexion should never be represented by the same tone as white linen collars and cuffs in the same plane, or by any lighter tone; and that the highlights on the face and hands should never be as light as any other area in the picture.

The letter concluded with a request for an expression of opinion on this subject, and the reply was to the effect that the subject was too broad to be discussed within the limits of a letter, but that if so desired an essay on the subject would be prepared. This suggestion met with the approval of the editor, and the following discussion is the result.

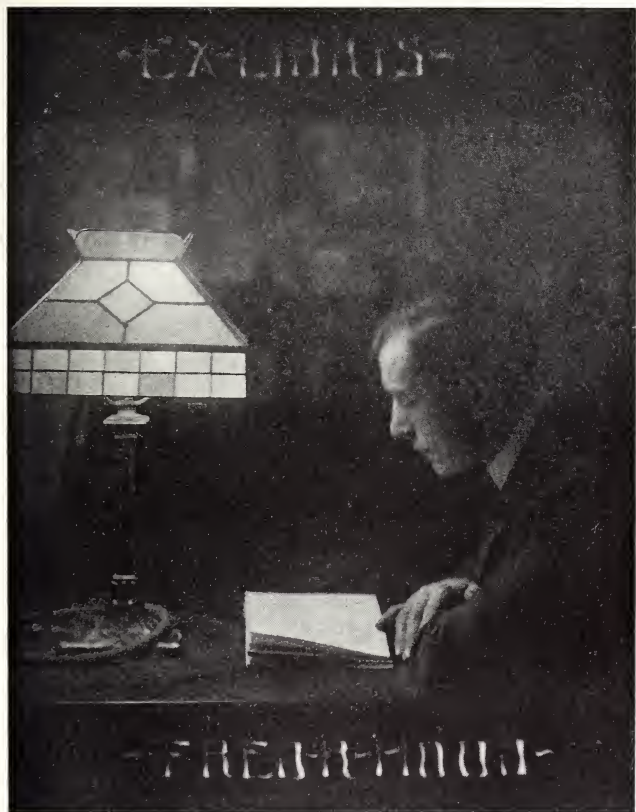
The aim of the portraitist, whether he work with a camera, a brush, or an etching-needle, is (or should be) to represent his sitters as we are accustomed to see human beings—not as we may, falsely educated, think we see them, nor yet as we see them when making a close and careful examination, but in accordance with the mental image we have; and the nearer a portrait approaches to the *mental image* which the sitter's acquaintances carry, the more successful it is as a portrait. This explains the well-known fact that an amateur snap-shot of a person frequently proves a more striking and expressive likeness than the efforts of a professional portraitist, since the snap-shot is gotten when the sitter is at ease and in a natural attitude, free from self-consciousness. Now, the ordinary untrained person is a very careless observer, his mental image being general, or, as the photographic pictorialist has it, "broad." For this reason the accurate and microscopic drawing of the anastigmat lens is to be deplored and avoided for everything except scientific records, but, on the other hand, the mushiness of the "Smith" lens (when used wide-open) and other lenses of the same type errs as far in the other direction, the ideal being—assuming the observer to have normal eyesight—about the degree of definition that is given by a rapid rectilinear lens used at full aperture and a print on the roughest grade of commercial platinum paper. Of course, in large prints a lesser degree of definition is permissible, but for prints from 5 x 7 to 8 x 10 this combination will give a good

rendering of gradations (which we wish to preserve) but will avoid the delineation of each hair, each freckle, and all the minor rogosities of the skin, so that we retain textures, the strongest point of photography, and yet have an image sufficiently soft in line-drawing to coincide with our mental image.

By the above-described means we take care of one element that goes to produce verisimilitude, but there remains another element of equal or even greater importance, namely, color-values. For instance, if we photograph a rosy-cheeked, yellow-haired girl in a dark-blue dress, using an ordinary plate, we find that the dress will be light, the hair dark, and the ruddy color of the face will be represented by dark patches. Is this truthful? Of course, this is an extreme case, but we may be sure that what is violently and glaringly wrong in extreme instances is also wrong in cases where the error is not so apparent. How, then, shall we obtain correct values?

In the first place, the psychological effect of different colors is not the same, a warm color being apparently much lighter than a cool one of equal photometric value. (By "cool" is meant colors tending toward blue, by "warm" those tending toward yellow and red.) For example, if we place in juxtaposition a dark yellow and a light blue, so adjusted that the two colors reflect equal amounts of light, the yellow will appear to the eye much lighter. Bearing this in mind, and remembering also that the general tone of the Caucasian skin is yellowish, it will be seen that the usual effect of a face is light. If we call up the image of a friend his face comes to our mental vision as a light spot. When walking along a crowded street, making no especial effort at observation, we get the general impression of a series of light spots surmounting dark bodies. Furthermore, ordinary white linen reflects a certain number of blue rays that we are not usually cognizant of and can with difficulty see unless trained to look for color. Then, too, the absolutely white portions of a person's attire are as a rule small in area, so that they impress us rather as slight accents of light than as definite areas.

Now, it is admitted that the photographer who represents the highlights of the human face as of the same value as white linen is in error, for we neither see nor think of yellow as identical with white, but how about the one who gives us a white collar (full of gradation, to be



PORTRAIT NO. I
PAUL L. ANDERSON



sure, where gradation is least needed!), a black or nearly black coat, and a face the general effect of which is about one-third of the scale below the collar? The first one is outrageously wrong, to be sure, but he is nearer right than the second, for, as pointed out above, the *visual effect* of a face is that of a light spot surmounting a dark body, not an area of middle-tone between a deep shade and a glaring highlight.

Suppose we consider for a moment the work of the greatest master of portraiture that the world has ever seen, Rembrandt van Rijn. We find that his sitters had light faces, and *frequently the highlights of the face are the highest light in the whole canvas.* (See the first paragraph of this article.) Even when his sitters wore white ruffs, as they often did, the effect of the face is still light, the ruff being slightly lighter. "But Rembrandt was a painter!" Well, is there any reason why a photographer shouldn't be as truthful as a painter? Yes, there is: a painter is trained to see, to think, and to use his judgment, but it is so easy to get, with a camera, a representation — of sorts — of a natural object that most photographers stop there, using neither their eyes, their judgment, nor the apparatus that was given them to think with. This, however, is merely a reason, not an excuse.

To return. Rembrandt in painting a face loaded his brush with yellow — not a jaundiced yellow, but a warm, glowing color, and by this means (among others) made his flesh look like flesh, not like a layer of silver suspended in gelatine and spread over white paper. Now, it is undeniably the case that a warm tone gives a greater feeling of vitality to a portrait than does a cold one. The manufacturers of photographic supplies are beginning to recognize this fact (or at least to realize that someone else recognizes it), as we may see from the increase of "buff-stock" printing-papers and the frequency of instructions for redeveloping and sepia-toning the various silver papers. This is all very well, and a step in the right direction; but no amount of warm tones can "give an air of verisimilitude to an otherwise bald and unconvincing" portrait unless our color-values are as they should be, and by this I do not mean that each area of light or dark should be represented by its correct *photometric* relation, but by its correct *psychological* relation to other areas.

In the last analysis, this relationship must be left to each worker, and depends on his eye for values (which may be trained), his technical knowledge (which may be acquired), and his technical skill (which may be developed). I cannot give a formula which will instantaneously

and automatically produce ideal results. To be sure, I could do this for a specific case — actinometer-value of light, so-and-so; aperture, so-and-so; develop in such-and-such a solution for just so long; print thus-and-so on such-and-such a paper; but I'm not going to. Conditions vary so much that this would be useless, and a consequent waste of time. I can, however, give some suggestions which will help.

In the first place, an orthochromatic (or, more properly, "color-sensitive") plate is imperative. It is not necessary to use a panchromatic plate; the ordinary iso plate, such as the Standard Orthonon, the Cramer Portrait Isonon (or Instantaneous Iso) or the Seed L. Ortho is perfectly satisfactory. A correctly adjusted ray-filter is also a very desirable thing, though not indispensable; for satisfactory results may be got without it by using increased care in development and printing. It should be borne in mind, however, that a ray-filter which is adjusted for one plate is probably far from correct with another. Adjusted filters may be obtained for the Cramer and Seed plates, but I do not know of any adjusted to the Standard.

Now, what we want to do is to bring, say, the face into proper relation with the white linen. Hurter and Driffield have shown us that *the relative separation of tones is a function of exposure and the actual separation is a function of development.* An exposure which is just sufficient to give detail in the shadows will bring the highlights into correct *photometric* but not into correct *psychological* relationship. Therefore, since we wish to flatten the highlights, we must over-expose, that is, we must give four or five times the exposure necessary to render shadow-detail. Taken with the ray-filter, this means twenty to twenty-five times what would ordinarily be given, and most photographers will cry, "Impossible!" Perhaps it is — however, I do it, and I do not think I am the possessor of any magic art. My exposures, working with a lens at F/8 (rarely more than F/7), with the plates named above, with a five-times ray-filter (Cramer Isos III) and by ordinary window-light, range from two to thirty seconds, the average being about fifteen or twenty. A photographer who cannot hold a sitter that long had better study posing and self-control. I admit that with small children and with neurotic sitters such exposures are impossible, but in such cases we may do one of three things, as follows in order of preference: First, use a faster lens; second, take the sitter out-doors; third, discard the ray-filter. Do you happen to know anything of the work of D. O. Hill? He was a Scottish painter who became interested in



PORTRAIT NO. II
PAUL L. ANDERSON



photography about 1840, and made portraits which have never been surpassed and have seldom been equaled. With the crude apparatus that he had at hand he was obliged to give exposures of three or four minutes. Does twenty seconds seem much in comparison with that?

In the matter of development, the values are much better rendered if we develop in a weak solution, so the developer should not be more than one-fourth the usual concentration. Of course, a weak developer gives a soft negative (which we are aiming at) but should not give a thin one. If the negatives prove too thin to print well, we may do one of three things: intensify, develop longer, or develop in a weak solution until the shadow-details show well, then finish in a strong solution. Hurter and Driffield have shown that the *relative* separation of tones cannot be controlled by any modifications in the developer after development has begun; therefore the second and third methods will give identical results, the only difference being in the matter of time. Intensification does not necessarily give the same results as the others, the variation depending on the intensifier used, some intensifiers acting uniformly on the gradations, others having a selective action.

In printing, the face should be *light*. I do not mean that the highest light on the face should be the same as that on the collar, but the effect of the face should be that of a light space with strong accents near it, not that of a medium space in juxtaposition with a white one. Therefore, *print light*. If the negative is too strong, too harsh, too dense, the gradations in the white linen will not print through by the time the face is printed to the proper depth, in which case we may introduce some gradation (or at all events, tone) in the linen with pencil or stump, or we may reduce the negative with a selective reducer, *e.g.*, ammonium persulphate or potassium permanganate. At all events, even if the linen has no gradation, does it matter greatly? You have at least told the truth regarding the face, and will you lie about your sitter in preference to lying about his linen? Understand me, I do not advocate either blank white collars or faces as white as linen. On the contrary, I want (and for myself demand) truth throughout; but I want truth to appearances and not truth to fact, and if I must have an untruth I much prefer it in a comparatively unimportant place. Lest my readers think me a Philistine, let me say that I have probably printed as many faces in a medium-brown tone as the next man, and frequently do so yet, when working for pictorial results or for my own amusement. In

fact, I incline very much toward the use of a short-scale negative and a print in either an inordinately (and untruthfully) low key or one inordinately high, but for portrait-work I insist on psychological accuracy. It will be noted that illustration No. I is an exception to the general rule that "a collar should be lighter than the highest light on the face." Obviously, in this case it is because the linen is in shadow, and it has been proved by experiment that the effect of shadow is so great that black velvet in sunlight is photometrically lighter than white paper in the shade.

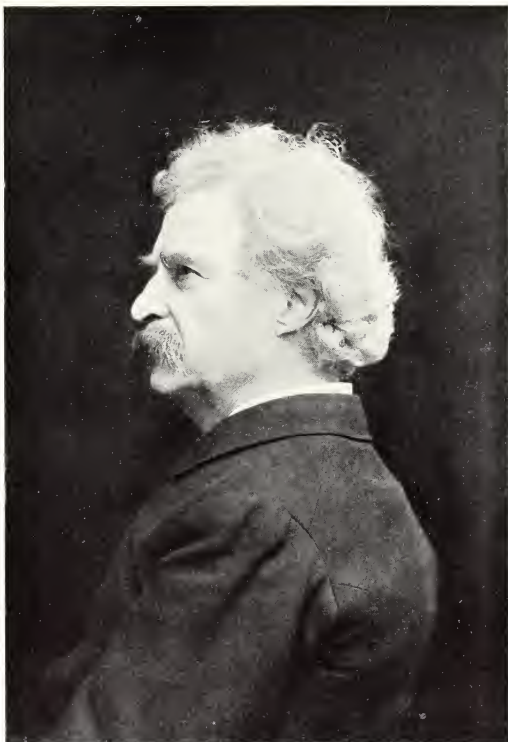
We see from the first paragraph of this article that the editor of this magazine insists that the face shall not be the highest light in the picture. Personally, I can see no objection to making it so if there is included in the picture no object that should be rendered lighter. Certainly we have good precedent in the works of the great masters for doing that very thing, and such treatment assuredly gives relief to a head. The Editor probably means "in no instance shall the highlights on the face and hands equal in value those on an included object which in nature is of a higher key than the face." In relieving a head against the back-ground, though, we must guard against having it project unduly, but a discussion of the way to avoid that fault does not come within the scope of this article.

No reference has been made to the use of the light, but the discussion above is applicable to almost any form of lighting. Of course, if a head be posed against the light, the general effect of the face will be dark; but the same technical methods will render a truthful result in any instance. Personally, I generally prefer a rather flat lighting, and never use a reflector, nor do I use a skylight; and when I curtain a window it is done to put a portion of the subject in shadow, not to raise the light. We practically never see people under a forty-five-degree light; then why represent them so?

Referring to the illustrations accompanying this article, I have three lenses, an R.R. of thirteen-inch focus, used on 6 1/2 x 8 1/2 plates, and working at F/8; a "Smith" semi-achromatic, 16-inch, generally used at F/8 on 8 x 10 plates; and a Darlot Portrait 13 1/2-inch, working at F/4.5, used on 8 x 10 plates. The developer I use is made up as follows:

Distilled water	14 ounces
Potassium Metabisulphite	300 grains
*Eastman's Sodium Carbonate	640 grains
Edinol	300 grains
*(If other anhydrous carbonate is used, take	800 grains)

MARK TWAIN
GEORGE G. ROCKWOOD



For use, take

Stock.....1 ounce
Water.....10 to 40 ounces

It will be seen that each ounce of the developing-solution contains from $1/2$ to 2 grains of the reducing agent and from 2 to 4 grains (approximately) of alkali. It should be borne in mind that these illustrations have lost much actual light in the halftone process, and much apparent light in translating from a warm color to the blue-black of printers' ink.

No. I: Date, March 25; Hour, 10:00 P.M.; Light, 2 Welsbach gas-jets; Lens, R.R.; Stop,

F/8; Plate, Cramer Portrait Isonon; Ray-filter, None; Exposure, 2 minutes; Developer, Edinol 1 to 30; Print, Platinum.

No. II: Date, April 30; Hour, 12:00 M.; Light, Intense sun, 1 south window 3 feet distant; Lens, Darlot Portrait; Stop, F/4.5; Plate, Cramer Portrait Isonon; Ray-filter, Cramer, Isos III (x5); Exposure, 10 sec.; Developer, Edinol 1 to 15; Print, Gum-Platinum.

* * * * *

The Summary. "*In representing nature, vitality counts for more than accuracy.*" — Van Dyke.



AT THE OPERA

HUBERT BROTHERS

Soft-Focus Lenses for Landscape-Work

ARTHUR HAMMOND

THE use of soft-focus lenses for portraiture and figure-studies is now becoming very common among pictorialists, and the many advantages of such lenses for portrait-work are widely recognized. Not only are the softness and quality of the image more pleasing from the artistic standpoint, but, from a more material and practical point of view, the fact that very nearly all need for retouching is done away with and that the negatives will give satisfactory results by straightforward printing is alone sufficient reason for their use.

But portraiture is not the only branch of photographic work in which such lenses prove their superiority in picture-making; they can be used for landscape-work, for sea-pictures, for flower-studies—for anything, in fact, when a *picture* is wanted, rather than a scientific or topographical record.

For pure landscape-work such a lens as the "Semi-Achromatic," or the "Spencer" soft-focus lens, will give very charming results, and the amount of softness can at all times be easily regulated by the diaphragm. At the full aperture of F/4.5 the image given by the Spencer Lens is very soft and diffused, of very pleasing quality and quite appropriate for some subjects and under certain conditions of light, but perhaps too soft and fuzzy for many people who prefer bright and crisp results. The image can be sharpened by closing the diaphragm till at F/11 or F/16 the lens will give very nearly as sharp a picture as any lens. So, it will be seen, the quality of the image is at all times completely under control, as the amount of diffusion can be easily regulated by the diaphragm.

These lenses are fully corrected for chromatic aberration so that the effect seen on the focusing-screen is just the same as the effect secured in the negative.

When used at a fairly wide aperture, such as F/6 or F/8, these semi-achromatic lenses appear to possess an unusual amount of depth of focus. This is, no doubt, due to the fact that there is no plane in the picture that is absolutely sharp, and therefore the difference in definition between the planes that are in focus and those that are out is not so pronounced, for with such lenses as the "Smith" and the "Spencer" there seems to be a belt of focus rather than just one plane. Even when some object or some plane in the picture is in focus, it seems to be possible to rack the lens in or out an appreciable distance

without altering to any great extent the definition of this object or plane. In this way the whole character of the picture can sometimes be changed. We can, for instance, have detail in the background or we can rack out a little and have the background diffused and softened and yet keep the definition of the foreground-objects pretty nearly unchanged in each case. Lenses of this type should preferably be used on a camera that has a focusing-screen. A scale for focusing would not be entirely satisfactory, for it is in the focusing that the worker has some control over his results. As I have previously mentioned, the quality of the background can be varied; it can have as much or as little definition as seems best for the picture. Then again, the general quality of the image should be studied on the ground-glass, for the softness or diffusion of the image and therefore the character of the picture can be controlled. In all these things, only individual taste and judgment can be employed; mechanical scales and pointers are not of much use. Now this, to my mind, is one of the greatest arguments in favor of such lenses for pictorial work, for when using them there is some scope for individuality; the result is therefore far more personal, less automatic and mechanical.

If two photographers, both competent workers, were to put their cameras close together, side by side, and each take a picture of the same view at the same time, using fully-corrected lenses of the same focal-length, it is more than likely that the pictures would be pretty nearly identical, provided of course there were no after-manipulation of the negatives, and it would be hard to tell which took which; but if two workers, each possessing individuality and a soft-focus lens, were to take pictures of the same view at the same time, the results would, very probably, be entirely different. So many and varied are the effects which can be secured by control in focusing and by regulating the diffusion that it would be most unlikely that both would treat the subject so that the results would be alike.

A well-known professional photographer was trying out a long-focus "Smith" Lens in his studio one day, and three or four photographic friends were present. With one of them acting as a model, the others, in turn, focused the picture on the ground-glass. Each one got on the screen a picture he considered satisfactory and the effect he liked best. When each man was



through focusing, the position of the ground-glass screen was carefully marked on the base-board of the camera, and when all were through the marks were compared and it was found that there was a difference of some three inches between the two end marks.

It will be quite evident, therefore, that when so much variation is possible, a focusing-scale and pointer would be far from satisfactory. It will also be apparent that, if each man were able to focus the picture so that it appeared right and yet have so much variation, there must be a good deal of scope for control in focusing.

I have had a "Smith" Lens for a long time and have used it a great deal. Yet even now I sometimes get — more by luck, perhaps, than by judgment — an effect of lens-quality that is quite different from any I have had before. This element of uncertainty is, an added charm.

With an ordinary lens, you know just the sort of picture you will get, provided, of course, the various operations are successfully carried out; but with a soft-focus lens (under the same proviso) you know you will get something good, though it is pretty hard to tell exactly how good it will be.

Pictures taken with such lenses are quite distinctive. The softness is not in the least like the effect secured by throwing the image out of focus. The focusing has to be done very carefully, and, as a matter of fact, it is more difficult to focus correctly with such a lens. With an anastigmat there is one definite point at which the image is sharp and that point is quite clearly and easily determined; but with a soft-focus lens there is no such definite point and the whole picture, the character and quality of the image, must be carefully studied. Careless fo-



THE WATER-FRONT — GLOUCESTER

ARTHUR HAMMOND

cusing will give a result that is soft merely because it is out of focus, and the peculiar and distinctive quality of the lens will be missing.

It is hard to describe this quality. It cannot be compared to anything else, for there is nothing else just like it. Alvin Langdon Coburn describes it as "a quality of image that I had dreamed of but never believed I would be able to get." The only possible way to find out about it is by practical experience.

In referring to the "painter-like quality" which is imparted to the picture by the overlapping of the edges and outlines of the image, I do not by any means imply that the object in using lenses of this type is to try to get results that look like paintings. Even if it were possible to do this, I do not think it advisable. Every means of pictorial representation should display the characteristics of its kind. A photograph should be frankly a photograph and not an imitation of anything else. As a photograph, I see no reason why it should not be just as pleasing and as satisfying to the artistic sensibilities as a picture produced in any other medium. A man may be an artist and still use camera and lens instead of paint-box and brushes. Like the painter, the camera-artist must pay strict attention to the composition of his picture, the arrangement of line and of mass. Like the painter

he may attempt to depict moods of nature rather than mere records of facts, and if he finds that the softer definition and more pleasing quality of image produced by a semi-achromatic lens gives him more nearly the effects he is seeking, then it is perfectly right and legitimate for him to use such lenses to secure certain effects, just as it is right and proper for a painter to vary his results by his choice of medium — water-color, oils or pastel — and by his methods of applying the color — his brush-work and technique.

Though I do not by any means advocate the universal use of lenses of the soft-focus type, yet I believe that their possibilities in the hands of an artist for work of a purely pictorial or decorative character are truly great.



FINISH is not dependent upon putting in everything which nature contains, else would art not be a matter of selection. Finish, though interpreted singularly by different artists as to degree, is universally understood to mean the same thing. Finish is the expression of the true relations of objects or of the parts of one object. When the true relations or *values* of shade and color are rendered the work is complete. — *Henry R. Poore.*

Points on the Making of Gaslight-Paper Prints from Uneven Negatives

I. W. BLAKE

DID you ever notice how delightfully easy the mere making of gaslight-paper prints looks in an advertisement? That is, how jauntily and with what nonchalance the apparent simplicity of the operation is set forth by the figure of that dapper youth who, with strictly up-to-date squareness of jaw and shoulders, and with a comfortable pipe between his lips, holds a printing-frame any old way and any old distance from a large lamp (with this last, as you may have noted, shining full glare into his unprotected eyes); expecting with all the fascinating confidence of inexperience that each print made in this happy-go-lucky fashion will hatch out a prize-winner in the purity of its clear-cut blacks and grays?

Don't you see how easy it all looks? And haven't you tried it and blamed the paper-maker all over the fields for the results? Of course; who hasn't? And yet, the paper-maker *is* somewhat at fault, because he deliberately, but without malice aforethought, leads us into trouble through a pleasant advertisement which conveys the subtle suggestion that care in manipulation is not necessary.

Now, to get down to facts, exactness *is* necessary, that is, if we propose to turn out for our home picture-books really superior gaslight-paper prints. Haphazard ways and means of doing are not to be tolerated. Anybody can make a fair gaslight-paper print from a good negative, but to make even a fair one from a poor negative—that is, poor within the bounds of reason—to make such a print calls for judgment, patience and deftness of manipulation.

This is doubly so in the case of printing from an uneven negative, and as we all know to our sorrow, many of our negatives are thin in some places, and dense in others. How, then, can we expect to even up inequalities of this nature by carelessly presenting such a plate before the light at any guessed-at distance, or in any off-hand position?

Taking an uneven negative, then, as the base of operations, how may we proceed in order to bring out its best? Simply by making all allowance for its weaknesses, and coaxing forth whatever it may have of strength. This we can do through a certain method of manipulation comprising a constant back and forth or "sawing" movement of the negative as it faces the light, added to the end-over-end turning of the negative at timed intervals. This end-over-end turn-

ing is for the purpose of presenting the top-face, side-face, bottom-face, and remaining side-face each in succession to the axis of the lamp-flame, so that each section (so to speak) of the negative stands directly opposite the greatest intensity of light during its period of exposure.

Commonly, the axis of the strongest illumination in the printing of gaslight-papers is the center of the motionless plate, the light being adjusted purposely to fall in that locality. Now, it stands to reason that such a "blare" of uncontrolled light falling upon one immovable center is too concentrated to give good results. Just here lies the advantage of the steady "sawing" movement combined with the sectional exposure; for by this end-over-end turning, we are able to give, say five seconds' exposure to one part, twenty seconds to the succeeding part, three, and forty seconds respectively to the third and fourth parts of the negative; while through the steady to-and-fro movement of the printing-frame we overcome to a marked degree the danger of getting those dark streaks and blotches which come when we try to force exposure with the negative stationary.

Now, this plan of keeping the printing-frame in motion may or may not be new in gaslight-paper printing. The writer does not recall seeing it advised in this line of work, although it is common in the making of combination-pictures on printing-out paper. Nevertheless, whether new or old, this back-and-forth movement, combined with the end-turning, will draw out all there is in a superior negative, and more from an inferior one than can be obtained in any other way.

And really, it is not difficult to make fine gaslight-paper prints when we work in a systematized manner. Just one settled place for the lamp, which should be backed up against something solid, so that it will not slide about on the table. Just one height of lamp-flame, that is, turned as high as possible without smoking; and always the same lamp—one with a low heavy base equipped with a No. 2 burner answering all ordinary purposes, providing the oil-consumption is clean and even. Always the same measured distance between the lamp-chimney (which is a definite point from which to measure) and the face of the negative—say, nine inches; and one special box against which the back of the printing-frame rests—this box solid enough not to be pushed out of place by



AROUND THE GRATEFUL FIRE

ARTHUR HAMMOND

casual knocks. And lastly, always the same book or books beneath the printing-frame to carry the center of the negative *higher* than the axis of the lamp-flame. This height may be set once for all by standing the printing-frame upright, and slipping books under its end until the lower one-third of the negative stands in line with the lamp-flame.

One who has not tried this way of handling an uneven negative will be likely to suggest there must be some effect from the diffusion of the light-rays outside the point of their greatest concentration. That is, there must be a slow printing-action on the parts more distant. This is true, but it serves to blend the sections into one harmonious whole, and often reduces the printing time of the extremely thin parts of the negative, so that some allowance should be made in estimating the time for negatives with these properties.

These details reduced to automatic adjustment—the aim being to relieve the worker from guesswork and waste of time—the only factor now to be looked after will be the estimating of the varying exposures, while the manipulation of the negative itself is as follows: When the printing-frame with its negative and the kind of paper best suited to the negative is ready for work, it is backed up against its steady support. As it stands facing the lamp, its lower

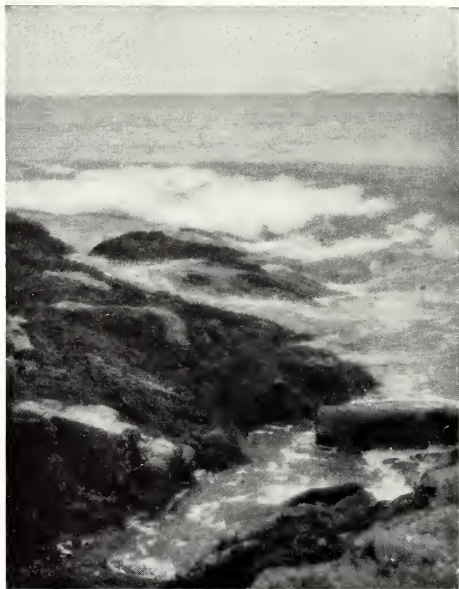
third receiving the greatest intensity of the light—this lower third being the top-face, side-face, bottom-face or remaining end-face, as may be—all that is now required for this way of printing is to keep the frame “sawing” to and fro steadily through a distance of three or four inches during the time of exposure. Then “end-over” the frame—that is, bring *down* the section next in order, and “saw” this back and forth through its apportioned time, and so continue until each section of the negative, in succession, has been moved to and fro before the light its allotted number of seconds.

At first there may be some difficulty in judging the proportionate exposure-times, but a little practice will enable the worker to adjust these almost mechanically after a moment's study of the individual negative. And, once learned and noted in full upon the negative-envelope as thus and so for each section, a good print may be had at any time, provided exactly the same accessories are in use.



THE aim of art is not exact reproduction of nature, but creation, by means of forms and colors, of a microcosm wherein may be produced dreams, sensations and ideas inspired by the aspect of the world. — *Theophile Gautier*.

*SURF AT NAHANT
ARTHUR HAMMOND



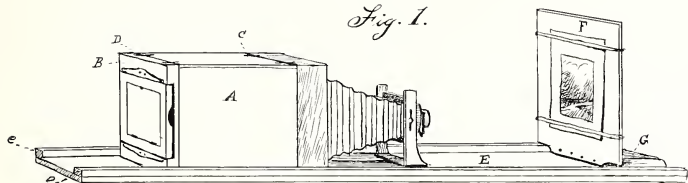
A FISHERMAN'S COTTAGE
ARTHUR HAMMOND



Adapting a Short-Focus Camera to Copying and Enlarging

WILLIAM S. DAVIS

Fig. 1.



THOSE who possess only short-focus cameras often wish to do some copying and enlarging without going to the expense of purchasing a special outfit for the purpose. Such being the case, the suggestions here presented may be of interest, as the necessary attachments can easily be made at trifling cost by anyone who is handy with tools.

To be adapted to the purpose, the camera must be of the folding type and have a removable back, but practically all the ordinary front-focus modern hand- and tripod-cameras meet these requirements, and even some of the larger pocket cameras are available.

First, to make the camera suitable for copying small prints full size, making lantern-slides from negatives of various sizes and the like, the attachments shown in Figs. 1 and 2 must be made.

As every amateur who has used a camera of the focusing-type knows, the nearer one gets to an object the greater the distance must the lens be from the plate; so, owing to the fact that short-focus cameras allow the lens-front to be racked out only an inch or two beyond the position of normal focus for distant objects, it becomes impossible to copy a near subject "same size," because to accomplish this it is necessary to have the lens twice the normal distance from the plate. Supposing one wishes to use a 4 x 5 camera with reversible-back, the first thing to do is to ascertain the focus of the lens, if this is not already known. For the present purpose this may be determined well enough by focusing sharply on something several hundred feet away and measuring the distance from the center of the lens to the focusing-screen. Then the camera should be fully extended and the amount of extra focal capacity noted; which, with a lens of six-inch focus (as usually supplied by the maker in the 4 x 5 size) will be about two inches. As a six-inch lens must be twelve inches from the ground-glass to make the image the same

size as the object, this leaves four inches to be supplied by the extension-box A shown in Fig. 1; but for safety it would be better to allow five or six inches for the length of this. "A" is simply an open box, made of thin wood, of the same size as the outside measurement of the camera. Rabbits must be made on each end to fit those on the camera and the reversible-back respectively, and it will strengthen the box and make the joints along each corner light-tight to tack in small strips of wood about half an inch square; after which the whole should be blackened with either some stain or the flat-black paint, ground in Japan, which can be procured at the paint-stores.

Fine brads, from which the heads have been removed, are driven into the front end of box on the top and bottom where they will engage the spring-clips which ordinarily hold the reversible-back in place, and on the rear end a set of four clips similar to those just referred to must be fixed in position to snap over the pins in the reversible-back, B.

With this extension attached one is provided with a long-focus camera; but, for use when copying photographs and small articles of various kinds which have to be fastened to a board while the work is being done, it will be found a great convenience to make a runway and copy-holder. The runway or track, E, is a smooth board, about seven-eighths of an inch thick and six or seven feet in length, on which are nailed two guide-strips, ee, just far enough apart to allow the camera to slide easily but without any side-play.

The copy-holder consists of a thin pine board, F, of whatever size is required for the work one wishes to do, battened on the back to prevent warping. This is joined to a base, G, of thicker wood, just the right width to slide between the guides, ee, and long enough to balance the holder properly. A piece of lead or iron might be fastened to this base to increase its stability

Fig. 2.

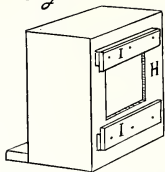
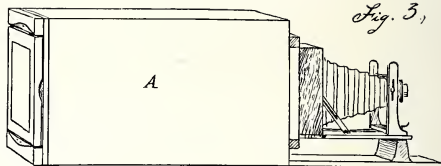


Fig. 3.



The outfit as arranged for ordinary copying is shown in Fig. 1, and, as both camera and copy-holder can be moved back and forth without their parallel relation to each other being displaced, the desired size of image can easily and quickly be obtained free from distortion.

For making lantern-slides by reduction from larger negatives the copy-holder is removed and the negative-holder shown in Fig. 2 substituted. This holder is in the form of a box five or six inches deep, which cuts off direct light from the face of the negative, and open toward the camera. In the closed end, H, which faces the light, an opening is made a little smaller than the negative used. At the top and bottom of the opening are two strips of cardboard or thin wood just far enough apart to allow the negative to slide between, and over these are placed overlapping strips, II, to hold the negative. By using the rising-and-falling front of the camera or sliding the negative from side to side, any portion of the latter can be centered at will.

If the extension-box, A, is made long enough, or a longer focus camera can be used, the outfit may be employed for making enlargements from small negatives. Personally I have found such an attachment quite convenient, for although having an 11 x 14 enlarging-apparatus, I make many 5 x 7 prints from $3\frac{1}{4} \times 4\frac{1}{4}$ negatives and find the smaller instrument permits of more rapid manipulation in some respects. The regular plate-holders are used by placing the sensitive paper in position under plates of clear glass, making allowance of course for the thickness of this glass when focusing. This can be done by inserting a cardboard frame the size of the plate-holder, and the same thickness as the glass referred to, between the ground-glass-frame and camera-back while focusing, afterwards withdrawing it before the holder is inserted.

By making the extension-box cone-shaped or of larger size, as represented in Fig. 3, and fitting it with a holder and focusing-screen, the capacity of the camera may be increased, it being quite practicable to adapt a 4 x 5 size to make $6\frac{1}{2} \times 8\frac{1}{2}$ or even larger pictures. The length of extension necessary for the degree of enlarge-

ment wanted can be found by referring to the tables of enlargement and reduction for lenses of different focus which are published in the various annuals.

Some may question the value of such an attachment for enlarging when cheap fixed-focus enlargers can be bought for small sizes, but the reason is this. With the attachment described, one can select any portion of the negative, center it, and enlarge to the full capacity of the apparatus just as with an expensive outfit. This cannot be done with a fixed-focus enlarger. Another advantage is in the matter of lenses. For using the method described, the regular lens is employed, and this makes a great difference in the length of exposure required (if it is a good R.R. or an anastigmat) as the cheap enlargers, in order to sell at a low price, have to be fitted with single lenses, and to make sure of their giving even a fairly sharp image a very small stop is used, so that many minutes' exposure is often needed when ordinary "gaslight"-paper is employed.

Golden Opportunities

WITH the advent of the winter-season come appropriate diversions for the amateur. And the professional? To him we present the consideration of lost opportunities. No, not lost entirely; for they still can be rescued from the clutches of a class of men which is in no sense a credit to the profession. We refer to the specialty of photographing dinner-groups, private theatricals and similar subjects by flashlight, which, in some of the larger cities, has degenerated into an activity now beginning to engage the attention of the police-authorities. Wanted, therefore, respectable, energetic and trustworthy workers to cultivate a field of photography, which, while demanding supreme technical skill and adequate resourcefulness, promises quick and abundant pecuniary profit. Of course such specialists will equip themselves with the latest and most efficient apparatus of the smokeless type. — *Wilfred A. French.*



MRS. MELVIN H. SYKES
RUDOLF DUEHRKOOP



EDITORIAL

A Notable Success in Color-Photography

THE invention of color-photography by the Lumières still marks the most important event in the history of photography since the advent of the daguerreotype. A completely-successful Autochrome will always be a source of wonder and delight to the cultivated mind. To the painter, in particular, a fine specimen of self-colored photography will ever be a revelation of nature's mysteries and a token of man's limitless ingenuity, as well as a challenge to his own interpretative powers. The Autochrome process has been frequently maligned on account of the numerous inadequate productions exhibited by obviously unskilled practitioners. Such meretricious experiments are a libel on a process which, while it fires the ambition of every color-loving camerist, demands expert technical skill and sympathetic art-insight. All who do not possess these qualities are unwelcome meddlers. Nor is the Autochrome process a pliable medium, as is photography with ordinary plates. The effects of soft contours, or of melting diffusion with vaguely-indicated planes, are not convincing with the Lumière invention, nor, indeed, with any other method in which the trichromatic screen is incorporated with the sensitive film. Attempts have been made to treat the Autochrome plate unconventionally, to infuse into the impression the eccentric personality of the practitioner, as is being done by well-known monochromists. But the results are most unhappy, the panchromatic effect, its truth, clearness and harmony, having been totally destroyed. To these workers, too, we would say, "Hands off!"

Among the many truths enunciated by painters during the past century, doubted and disputed and sometimes ridiculed by the general public, which have been established by the expert Autochronist are these: that green grass bathed in the golden light of the setting sun appears as yellow to the eye, and not as green; that the pure white cloud of mid-day contains pink; that the blue of the sky is visible on every object capable of reflecting it, even the black tresses of the model seated in the artist's studio. These phenomena were most beautifully exemplified in a collection of Autochromes which a company of art-lovers, including the Editor, was privileged to inspect at an improvised exhibition

at the Boston Art Club last September. The Autochronist was Alfred Homes Lewis, professor of mathematics in the High School of Commerce of New York City. In analyzing the full range of his colors, their infinite variety in hue and feeling, as seen in gorgeous sunsets, cloud-flecked skies, luxuriant flower-gardens, dew-laden fields or mountain-rimmed landscapes, one felt that Mr. Lewis has completely realized the potentialities of the Autochrome process.

He has discovered the secret of successful color-photography—scientific accuracy of exposure plus the mental equation. Moreover, Mr. Lewis is master of pictorial composition and a sympathetic interpreter. His Autochromes are a triumphant refutation of the charge that the Lumières' invention is but an interesting experiment and incapable of serious achievement.

The Flashlight-Field

ONE of the most profitable photographic specialties is flashlight-work; but few excel in this field. The public realizes that ghastly and distorted faces are not necessary concomitant of a flashlight-group, also that some men engaged in this work do not represent the highest and best in the profession. Shall this lesson go unheeded?

High Duty on Negatives

ACCORDING to a decision recently rendered by the Board of General Appraisers, glass photographic plates which have been exposed and developed must stand duty at the rate of forty-five per cent ad valorem under the present tariff-act as manufactures of glass. Hereafter, every tourist returning from a foreign country who has in his possession glass negatives will be required to pay an import-duty of forty-five per cent ad valorem, the same as on lantern-slides of foreign manufacture. The only way to evade the payment of this exaction is to bring home the exposed plates—on which the duty is only twenty-five per cent—and have them developed in this country.

Photographic lenses, opera- and field-glasses, etc., classified as optical instruments, also cameras with lenses, are subject to forty-five per cent duty. The returning traveler is, however, permitted to include any of the before-mentioned articles in personal effects, which, to the amount of one hundred dollars, he may bring in duty-free.

THE ROUND ROBIN GUILD

An Association of Amateur Photographers

Conducted by ELIZABETH FLINT WADE

This association, conducted under the auspices of PHOTO-ERA, and of which PHOTO-ERA is the official organ, is intended primarily for the benefit of beginners in photography, although advanced camerists are just as welcome and many are numbered among its members. The aim of the association is to assist photographers by giving them information, advice and criticism in the Guild pages of PHOTO-ERA and by personal correspondence. Membership is free and may be obtained by sending name and address to PHOTO-ERA, The Round Robin Guild, 383 Boylston Street, Boston. Send a stamp for complete prospectus.

Photography in November

No description of November has probably been so often and so widely quoted as that of Bryant's,

"The melancholy days have come,
The saddest of the year,"

and to many it fitly describes the month which they term the month of dreariness. To the amateur photographer November instead of being a month of dreariness is a month of photographic good cheer, for no other month is so prolific in mists and fogs and atmospheric effects. A walk abroad in the November weather speedily proves that this is the case and one will at once equip one's self with apparatus for securing unusual and artistic photographs.

We can all make pictures in clear weather; it is the real artist who can make them on dull and foggy days. The light in November is almost the dulllest of all the year, yet the skies of November fit the November landscape, showing that Nature knows what is most fitting—even if we disparage her methods.

The proper outfit for making negatives in dull weather is, first, a lens with wide aperture, and, second, the rapid plate. It is also the time to use an orthochromatic plate in order to get soft gradations of lights and shadows instead of the uniform gray which is likely to be the result when the ordinary plate is used. Then, too, there are still leaves which have not yet fallen, some in very brilliant tints, particularly along the edges of swamps and small brooks, and the orthochromatic plate is the only plate which gives us their true rendering of color-value.

The woods in November are full of pictorial possibilities. The leaves have fallen in greater or less quantities, and some of the trees stand bare while others have part of their foliage still clinging to them. The leaves piled and scattered on the ground solve the problem of a proper foreground, while the partly-denuded trees admit light where before the dense foliage precluded its entrance. These conditions make ideal ones for getting pictures of "wood-interiors," for, although the foliage is lacking, one gets better composition and conveys in his picture a much better idea of a wood than in a picture taken in midsummer "when all the woods are green."

One should not despise the fields and marshes as subjects. Weeds and small shrubs are to be found along the edges of the fields, and even the stubble may be utilized to round out one's picture of an autumn day. In hilly pastures one finds the tall mullen-stalks, the hardy live-forever — though its blossoms may be a trifle brown — the milkweed with some of its filmy seeds still attached to the open pods, the ox-thistle bristling with thorns, the wild teasel, and many similar plants which may be used as subjects and which emphasize the time of the year almost better than the bare fields. The marsh offers reeds, flags, and swamp-grasses as acces-

sories for a November picture, the faded green of the reeds combined with the brown of the cat-tail, its fuzzy substance broken and escaping ready to fly away, giving one a chance to secure a very taking subject. If the picture is made on a windy day when the reeds are bending and swaying while the blossom itself of the cat-tail maintains its upright position, the result is very effective and natural.

The muddy roads introduced into a picture, the ruts filled here and there with water, convey the idea of November. Such a picture taken about sundown following a cloudy day gives us fine possibilities of picture-making. Choose the conditions when the gray clouds cover the sky, but at the horizon is the long line of golden yellow where the sun is just disappearing. There is a magic in this dying light which practically transforms the landscape and produces a condition of light and shadows not obtainable at any other time of year.

Each season of the year has its own particular charm, but November stands alone as the one month when one may become a companion of the mists and fogs and driving rains and embody their semblance on his sensitive plates. The amateur who has hitherto refrained from taking his camera afield in November is urged to go out the very first day of the month and see what beautiful pictures he can obtain even though the clouds hang low and Nature shows a sullen countenance.

Mounting Prints

IN spite of all that has been said not only in articles, but in the Answers to correspondents who seek information on the proper and artistic mounting of prints, photographs continue to arrive at the office of PHOTO-ERA either mounted in a most inartistic manner or else not mounted at all. These pictures are submitted in the monthly contests, though the amateur knows that he must compete with not only a large number of members of the Guild — we have nearly 2500 members now — but also with the work of the best amateurs in the association.

Now, if a picture is worth sending to a contest it is worth the very best dress in which we can array it, for the mount of the picture is really its dress and either enhances or detracts from the merit of the print according as the artist has taken pains to choose the quality and color of the mount.

Almost the first thing one should determine on in mounting a picture is to give it a proper margin. Even the professionals realize the effect of a good margin and now instead of one's picture being pasted flat on a mount with no margin whatever, as in the old days, mounts with wide margins are chosen and the setting of the picture looked to quite as much as the picture itself. Margins of proper width give balance to a picture, but the margin should not be of equal width all the way round. The lower margin should always be from an inch to four inches wider than that at top. If

GARDEN-VISTA —
EARLY MORNING
EDWARD H. WESTON
SECOND PRIZE — GARDENS



the top and bottom margins are of equal width, the effect to the eye is that the bottom margin is narrower than the top, and the picture seems to have slipped down below the center of the mount. This is one of the tricks which our eyes play us—an optical illusion. In some cases the top margin should be narrower than the side margins, in others the top and sides should be equal. One determines which will give the best effect by laying the print on the mount.

Perhaps the most difficult thing for the untrained amateur to do is to choose the proper tone for the mount, a tone which shall not only harmonize with the tones of the print, but shall also bring out its best points. Some mounts will bring out the shadows and apparently add to their detail, while a mount of another color would seem to allow the detail to be lost and the picture would have a flat appearance, as if made from a thin, under-exposed negative.

Before beginning the task of mounting one's prints the amateur should provide himself with a quantity of paper of different tones and textures. No mounting-paper will be found quite so adaptable as the cover-papers, the kind used for pamphlets and small booklets. They come in all grades and as they are now becoming justly

popular as mounting-papers, the manufacturers are making them particularly for the photographic trade. A card to any manufacturer of these papers will bring a generous supply of samples from which to choose one's mounts. The imported Japanese papers make very artistic mounts, for the Japanese are masters of the craft of paper-making. The papers are beautiful in both tone and texture, are very tough of fiber and bear a great deal of rough handling, even the delicate Japanese tissue, which is an ideal paper for sensitizing and also as a background for a print when placed over a heavy sheet of paper of darker tone. The Japanese papers all bear a name which describes their color. Tokogawa is a paper yellow-brown in tone and very fine for certain grades of sepia platinums, while Ishibe is a warm brown, somewhat of a medium chocolate tone. Kasato is a clear, warmish gray and when used for a gray print gives depth to the print and enhances detail. Although blue is hardly to be chosen for a mount, still, for some decorative effects it is very attractive. The Japanese blues are not so crude in color as are those of domestic manufacture, the one called Koijio being a very deep blue and bringing out a marine with good effect, while Kokuwa is a dull gray-blue and for certain



AN ITALIAN GARDEN

JAMES THOMSON

THIRD PRIZE — GARDENS

tones of gray prints is more effectual in deepening the tone than almost any other color one could select.

In choosing textures of mounts select one which will go with the texture of the picture. One should not mount a smooth print on a very rough paper, nor a very rough print on smooth paper. To decide on the proper color of a mount, first trim the print, and do not be afraid to trim off all the parts which detract from the composition, then lay the print on the different mounts and note the effect. It will be seen that one mount will emphasize the highlights, another will bring out detail in the shadows, while still another will impart to the print a dull and lifeless look. Choose the one which brings out the picture to its best advantage, cut the mount large enough to allow for a generous margin, and attach the print to the mount by the top—do not paste it flat.

Unless a picture is to be used for commercial purposes, do not use a commercial mount. It is very rarely that we find in these mounts one which is suitable for the picture. When intending to send a print to a contest or to have it on exhibition or simply to add it to one's collection, mount it in as artistic a manner as possible. Never send an unmounted print to a competition. One of the points on which a picture is judged is its finish and mounting, and if unmounted—and we have quite a number that are thus sent—it takes off just so much of its chance of winning a prize, and in these days of keen rivalry one cannot afford to be handicapped because one will not take pains to do one's best.

The Hat

THERE is no article of dress which shows so much variation each season as does woman's headgear. Not only does it vary in shape, but also in the style of trim-

ming and the size. While a certain style is so very becoming that it would seem it would always be so, let one be photographed in the hat, and within six months after the picture is taken the hat will look *outré* and unbecoming. Yet subjects continue to be taken in their hats, feeling sure that it will always look as attractive as it does while its style is in vogue.

The same test which applies to a woman's holds good for a man's hat also, for though a derby hat seems to change its shape only slightly, it is a very marked change and no man who had any regard for his appearance would be seen on the street wearing a derby hat two seasons behind the style. Yet the men go on having their photographs taken in their derbys just the same.

There is no doubt that a hat adds very much to the artistic merit of a picture, but it must not be a hat of a transient style. It must be something which has been worn so long that it has become an accepted part of the attire, like the Breton peasant's cap, or even the sun-bonnet of our grandmothers, a headcovering which is again coming into favor. Then there is the large picture-hat, like the one made famous by Gainsborough and now known as the Gainsborough hat, which, when worn by a subject to whom it is becoming—and it is almost universally so to young people—adds very much to the merit of the picture. There are fancy lace caps which sit lightly on the hair and look very "fetching," particularly on little children or on grown-ups, too, who have dark hair and piquant faces.

A small hat or a very large hat should never be worn when sitting for a picture; both will look like caricatures in a year's time. One should never be photographed in a hat which is covered with a mass of trimming, and never in one in which the trimming is massed at the back of the hat and towers above it. A



wide-brimmed felt hat worn back from the face and making a frame for it is not at all bad in a picture, but the wearer must sit almost full face to the camera and raise the chin well, otherwise the hat predominates and appears to be about to extinguish its wearer.

A filmy scarf is becoming to some faces and if arranged carelessly may be used to produce a picturesque effect which will be very pleasing. A hat which shades the face gives too marked contrasts, the shadow cast by it on the upper part of the face spoiling the modeling. If such a hat is worn one must use a reflector to lighten the shadows.

If the subject is a man, a soft felt hat of the Fedora style will give good lines, but a straw or derby will always present unpleasant lines in the picture, no matter how becoming it is to the wearer. Anyone who has an eye for artistic lines will advise his subject to forego the hat in his picture, and if he has not yet cultivated this point of view, then it is advisable to do so at once so that he may not be guilty of adding to the already-large collection of atrocious "hat" pictures.

Photographic Economy

PROBABLY there is no pursuit which involves so much waste as does that of photography. That is because its followers have neither learned nor practised thrift. One proverb ought to be chosen for the amateur's watchword, and that is, "a penny saved is twopence gained,"

for photography is an expensive pastime and, to one with strictly limited means, a constant drain on the purse.

There are many ways in which one may save and thus lower the expense-account. Take the matter of solutions, for instance. Some chemicals keep well in solution, others do not. Yet the amateur makes up a quantity of the chemical which has poor keeping-qualities, uses some of it, possibly does not need it again for a week or two and, when he does want it, finds that it has spoiled and a fresh solution must be made up. One way to save such a solution in the beginning is to cork the bottle tightly as soon as one has taken out what is needed, then pour melted paraffine over the cork. This substance will exclude the air and prevent the oxidizing or turning black of the liquid.

Glass-stoppered bottles are the choice for storing solutions, for they are practically airtight, particularly if when one puts in the cork he gives it a slight turn to force it a little farther into the neck. If, by standing, the cork becomes hard to remove, a drop of sweet oil around the rim of the bottle allowed to stand for ten minutes will loosen the cork and will not injure the contents of the bottle. If one bought these bottles they would perhaps be too expensive, but one can usually find in the collection of bottles which accumulate in a household plenty of glass-stoppered bottles which, when cleaned, will be just the things for his solutions.

Volatile solutions which lose something of their

strength when the bottle is opened should be kept in small bottles, such as two- and four-ounce bottles, so that one does not have to open a large bottle when one needs to use a liquid of this kind.

In mixing developers, it will be found much more economical to have the ingredients made up in powders to which only enough water needs to be added to make the required amount for one batch of developer. These can be weighed out at the dealer's, or one may weigh out his own powders provided he has scales for the purpose. The chemicals are wrapped in waxed papers, each chemical having its own color of paper, the different sorts wrapped in one enclosing paper which is marked on the outside with the amount of water needed to make into solution, and the powders are then stored in a can with a screw top. A piece of calcium chloride put into the can will absorb the moisture and prevent the powders from hardening.

There is a great waste in printing-papers. Packages are opened and not properly closed again and the paper spoils. It is the same way with plates; a few are left in a box, set on a shelf and forgotten, a fresh box opened, and later the others which might have been used are found to have lost all their usefulness as sensitive plates. Spoiled prints — hundreds and hundreds of them — are thrown away. Some of them might well be retained and will serve for experimenting on in the way of retouching or improving the negative.

One spends a great deal of money on useless apparatus. The advertisement of certain articles is so alluring and their good qualities are set forth so engagingly that we believe that they are among the "must-haves" of photography, when the fact is we can just as well do without them — and better, too, for it makes one more thing to take care of.

A good rule to follow when contemplating a purchase is first to look about and see if one hasn't something at hand which will answer the purpose just as well and thus save the money. Another thing to bear in mind is to use up one's material on hand before adding to the stock. Thus one will always have fresh chemicals and save money too, for then we will have no old to spoil.

It is the little leaks that sink a ship, and it is the constant outgo with no income which hampers one's work. By looking after the little wastes and seeing that there are none, and by occasionally making a picture which brings in a financial return, the amateur can make his photographic expenses so small that he can afford to indulge himself in the making of many pictures, but should always stick to the plan of making only those which will be worth the making.

Christmas-Cards

"CHRISTMAS-CARDS" is the appropriate subject chosen for this month's contest, which extends from November 1st to December 31st. The subject must embody some Christmas observance, some merry-making peculiar to Christmas, a holiday home-coming, a Christmas festival, or represent any feature which has become a part and parcel of this favorite holiday of all the year. The picture must be one which may be reproduced for a Christmas postal card, so it must have for its subject something of general interest.

There are so many subjects of this sort ready to one's hand that the trouble will be a superfluity instead of a dearth, and it will be hard to choose, perhaps; but, once having chosen the subject, stick to it till you have produced something worth while. If the first negative is not a success try again, and should the second be equally bad try still another. I know of an amateur who had a subject in her mind which she thought would make a "taking" advertisement and she made nearly fifty

negatives before she succeeded in getting what she wanted, but the financial returns were so great that she was well rewarded for all her "time and vexation of spirit" when trying to perfect the picture. First make up your mind just what kind of a picture you wish and then keep trying till you get just the negative you are after. Working in this way with a definite object helps one more than one realizes in making future pictures.

The object of this contest is to develop originality in our members, for one must think very hard to get a new idea in Christmas-cards. It would seem that the pictorial side of the subject had been pretty well exhausted, but there are still chances for anyone to come forward with something entirely new. One of the subjects to be avoided is that of the loaded Christmas-tree. Indeed this is rather a hard subject, anyway, for one can hardly convey by the photograph and within the boundaries of a postcard any idea of what a Christmas-tree really is.

Remember that the picture is designed for a postcard and choose the subject which will look well on a postcard and not look better on a poster. One may make the picture smaller than the card and embellish the blank space left in any way he chooses. One way is to draw with waterproof ink on tracing-paper a suitable design for a border and use the design for a negative. If one makes a print of this kind he will have to double-print the picture. The picture itself is first printed through a cut-out, the picture masked and the tracing-paper border adjusted and printed from, and the card then toned. One could not very well use gaslight-paper when doing double-printing on account of their being no guide by which to register the mask. If the tracing-paper design is used direct, the effect will be a white pattern on a gray background, but if the opposite thing is desired, the tracing-paper may be used to make a print of very thin quality on aristo paper and the aristo negative then used for printing the design on the card.

There is quite a stretch between now and the 31st of December, plenty of time for our members to put on their thinking-caps and originate something new in the way of a Christmas-card subject. Who knows but that the effort will bring one in a very pretty penny, for dealers and manufacturers are always on the lookout for new and original designs?

Motion-Pictures in Natural Colors

WHILE thousands of persons in each of the larger cities in this country have seen and admired the most recent invention in color-photography — Kinemacolor, a patented process of projecting motion-pictures in the true colors of nature — the public at large still remains in ignorance of the merits of this great scientific wonder. Besides its obvious superiority over ordinary motion-pictures, including those colored by hand, Kinemacolor shows 32 instead of 16 impressions per second, thus presenting a smoother as well as a more vivid and accurate idea of the original scene. The line of film passing through the projection-apparatus is colorless, yet by the mere introduction of a revolving disk of two separate colors, placed between the film and the projection-lens, the pictures thrown upon the screen assume all the colors of the original scene as it appeared when photographed by the motion-picture machine. Six companies, each consisting of a lecturer, several operators, an orchestra, and several assistants, are now exhibiting Kinemacolor in the largest cities of the United States, so it should be accessible during the season to most of our readers.

Kinemacolor is a stupendous advance on Kinematography and, although not wholly free of imperfections, is a marvelous achievement, absorbing, instructive and inspiring in the highest degree. None should fail to witness it. — W. A. F.

The Round Robin Guild Monthly Competitions

*Closing the last day of every month.
Address all prints for competition to PHOTO-ERA,
The Round Robin Guild Competition, 383 Boylston St., Boston, U.S.A.*

Prizes

First Prize: Value \$10.00.

Second Prize: Value \$5.00.

Third Prize: Value \$2.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning picture, or in later issues, will be given Honorable Mention.

Prizes may be chosen by the winner, and will be awarded in photographic materials of any nature sold by any dealer or manufacturer who advertises in PHOTO-ERA.

Rules

1. These competitions are free and open to all photographers, whether or not subscribers to PHOTO-ERA.

2. As many prints as desired, in any medium except blue-print, may be entered, but they must represent the unaided work of the competitor from start to finish, and must be artistically mounted. Sepia-prints on rough paper are not suitable for reproduction, and such should be accompanied by smooth prints on P. O. P. or black-and-white paper having the same gradations and detail.

3. The right is reserved to withhold from the competitions all prints not up to the PHOTO-ERA standard.

4. A package of prints will not be considered eligible unless return postage at the rate of one cent for each two ounces or fraction is sent with the data.

5. Each print entered must bear the maker's name, address, Guild-number, the title of the picture and the name and month of the competition, and should be accompanied by a letter SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in letter.

6. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA. If suitable, they will be reproduced, full credit in each case being given to the maker.

7. Competitors are requested not to send enlargements greater in size than 8 x 10 or mounts larger than 12 x 15 unless they are packed with double thicknesses of corrugated board or with thin wood-veneer. Large packages may be sent by express, Section D Rates, very cheaply and with indemnity against loss.

Our Jury

MR. WILLIAM HOWE DOWNES, art-editor of *The Boston Transcript*, who has for several years past assisted the Editors to judge the competitions, is now unable to serve any longer. Mr. William H. Kunz, the well-known pictorialist, who is now residing permanently in Boston, has kindly consented to act as the third member of the board.

Subjects for Competition

September — "Shore-Scenes." Closes October 31.
October — "Rainy Days." Closes November 30.
November — "Christmas-Cards." Closes December 31.
December — "Home-Scenes." Closes January 31.

Awards — Gardens

Second Prize: Edward H. Weston.

Third Prize: James Thomson.

Honorable Mention: Edwin A. Roberts.

BEGINNERS' COLUMN

Quarterly Contests for Beginners

In these contests all Guild members are eligible PROVIDED THEY HAVE NEVER RECEIVED ANY PRIZES OR HONORABLE MENTIONS in the past, FROM ANY SOURCE, AND PROVIDED ALSO THAT THEY HAVE NOT BEEN MAKING PHOTOGRAPHS MORE THAN ONE YEAR.

All prints submitted, except prize-winners, will be returned if postage is sent in a separate letter with the data. See rules 4 and 5 in opposite column.

Prizes

First Prize: Value \$5.00.

Second Prize: Value \$2.50.

Third Prize: Value \$1.50.

Honorable Mention: Those whose work is worthy will be given Honorable Mention.

Subjects for Competition

GENERAL — OUTDOORS — CLOSES JAN. 15, 1912

Any subjects, landscapes, figure-studies, genre, marines and animals.

GENERAL — INDOORS — CLOSES APRIL 15, 1912

Similar to the one above, but strictly interior-views.

The Stumbling-Block

Beginners should carefully note the fact that, although the jury is very lenient in judging the quarterly competitions, stained, dirty or untrimmed prints, or those printed through fancy border-masks, also unmounted prints, are at once thrown out. We do not expect camerists of less than one year's experience to produce masterpieces, but we do assume that they will send in their best work. A little more pains taken in finishing the print is often all that is needed. In the first place, unless the negative is much underexposed and overdeveloped — faults which may easily be avoided by consulting our Exposure-Guide and developing by the Watkins factorial system — most beginners will find it easy to produce fine prints on any of the well-known self-toning papers. Contrasty negatives should be printed on the soft or portrait grades of gaslight-papers; those lacking in contrast, on the hard or carbon grades. Make a number of prints and select the best one. Trim it carefully, taking the horizon-line as the base for squaring up. Mount the print by any of the usual methods and then, with a fine red sable spotting-brush and the correct tint of spotting color, carefully touch out all the white spots. Holes or defects in the negative should be spotted out in the same manner, using the red color known as opaque and usually included in the cheap set of colors sold by all dealers.

Prints for the competitions may be made on the double-weight papers now commonly furnished and dried as directed by the manufacturers so that they will be almost perfectly flat. They may then be mounted on cover-paper as explained in the leading article in the Guild Department for November. Harmonious mounting is always a strong point and may cause a picture to be preferred to another of equal merit if the latter is pasted on a commercial card-mount.

Answers to Correspondents

Readers wishing information upon any point in connection with their photographic work are invited to make use of this department. Address all inquiries to ELIZABETH FLINT WADE, 743 East 27th Street, Paterson, N. J. If a personal reply is desired, a s. l.f.-addressed, stamped envelope must be enclosed.

MARCUS LEADER. — **The Length of Exposure for a Pinhole-Camera** is about half as much longer than with a lens for a corresponding aperture. Double the length of the lens-exposure may be made, oftentimes with much better results. This refers of course to the very rapid plate and the small pinhole made with a No. 10 needle. The print which you enclose is from an underexposed plate. The composition is good but the detail too faint to make a good picture. Try again.

The following table is given in "The Watkins Manual":—

Watkins-Power Number	Diam. (inches)	Nearest Needle-Number	Most Suitable Distance (inches)
3	0.053	+No. 1	40
4	0.040	+No. 4	20
5	0.032	No. 5	15
6	0.027	+No. 7	10
7	0.023	No. 8	8
8	0.020	+No. 10	5
10	0.016	+No. 12	3½
12	0.013	+No. 13	2½

Multiply the Watkins-Power Number by the distance from pinhole to plate. The result is the F/number of the pinhole. Calculate exposure as usual, but give minutes instead of seconds, because the Watkins-Power Number represents only 1/60 the actual F/number.

GRACE T. R. — Yes, you can **Tint Transparencies** which have been dried by first soaking them in water till the film is softened and then immersing them in the color-bath. Do not use too strong a color, the delicate tints being much more satisfactory and more artistic.

F. L. R. — **Enlarging the Field of the Lens** means the bringing of the objects at the edge of the plate into as clear a focus as those in the center, and is called enlarging the field because it enlarges the space in which objects may be sharply distinguished. This is done by means of the stop: the smaller the stop the sharper the picture.

D. A. C. — **To Remove the Marks from your Velox-Prints**, dip a piece of absorbent cotton in alcohol and rub the abrasions gently. If the film is not broken, this process will be very effective in removing all blemishes such as you describe.

EDWIN SAYLES. — **Directions for Transferring the Film of a Broken Negative** to a whole piece of glass may be found in PHOTO-ERA for March, 1908, a copy of which will be sent to you if you will enclose stamps for it. The article is too long to be printed in our "answers" column.

P. O. WOOD. — **To Salt Paper**, dissolve 16 grains of gelatine in 8 oz. of water and when cold add 64 grains of ammonium chloride. Float the paper on this solution till the surface is thoroughly wet, then pin up until dry. It is then ready for the sensitizing-solution, which may be applied with a brush or by floating. You may use the combined bath for these prints or they may

first be toned and then fixed in hypo the same as for any silver print. You may buy in tubes enough of the powder for a combined bath to make four ounces, which will tone twenty-four prints. A tube of this powder costs only five cents.

DORA HEATON. — **When Making a Time-Exposure**, set your shutter to the highest tension, as after the exposure the shutter should close instantaneously. **In Taking a Picture Against the Sun**, see that the lens is shielded so that the rays of the sun do not strike the lens; otherwise, you will fog your plate. Some very good effects may be obtained, particularly toward sunset when the rays are of less intensity and the shadows are long and soft.

BEN DUNCAN. — **Aqua-Regia is the Only Known Solvent for Gold**. It is a mixture of nitric and hydrochloric acids in the following proportions: Nitric acid, 1 oz.; hydrochloric acid, 2 oz.; water, 3 oz. If you wish to prepare your own gold, enclose stamp for reply and directions for the use of the solvent will be sent you. It is rather too long to be published in our "answers" columns.

LISETTE TOWNE. — **The Best Hypo-Eliminator next to Water** is potassium percarbonate. Use from three to five grains to four oz. of water. The Lumières put up a hypo-eliminator which is very good indeed, but if you are particular to wash your plates and prints well, the use of such a solution is not necessary.

KARL G. F. — **The Monckhoven Intensifier** is made as follows: No. 1. Silver nitrate, 100 grains; water, 10 oz. No. 2. Potassium cyanide, 10 grains; water, 1 oz. Add the cyanide solution to the silver very slowly. At first a white precipitate is formed, but the solution finally clears. When it is almost clear add no more of the cyanide. Bleach the negative first in the usual bath of mercuric chloride, 100 gr.; potassium bromide, 100 gr.; water, 10 oz.; then treat with the cyanide-bath. This solution gives great density, so one must be careful not to overdo the operation. When the required density is attained, remove the plate and wash well. If left too long in the solution the negative will return to its original state.

ELLIS CARTER. — The reason why your **Nitrate of Silver has Turned Black** is because the crystals have been exposed to the air and have oxidized. The crystals as well as the solution should be kept in tightly-corked bottles and the bottles should be placed in a dark cupboard or else wrapped in black needle-paper.

DENNIS FLYNN. — **To Remove the Stains made on your Gaslight-Prints** by the use of ferrous oxalate developer, make up a 3% solution of potassium ferricyanide, and use 12 minims of it and 7 minims of nitric acid to each ounce of water. Dip the prints in the solution and rinse. If stain remains, dip again. It takes only a minute or two to eradicate the stain and the solution does not injure the color of the print nor bleach the image.

JAMES KIRK. — **A Rapid Fixing-Bath** is made by adding ammonium chloride to the hypo-bath, using the following proportions:—To each ounce of hypo use 210 grains of ammonium chloride and 5 oz. of water. This bath fixes very rapidly and is more quickly washed out of the plate than is the plain hypo-solution.

ANNA COLBORN. — **To Mount Prints Without Cockling** use mounting-tissue. If this is properly used, you will have no further trouble with your pictures' wrinkling as they do with paste for a mountant. The tissue comes in different sizes to fit the various sizes of paper. If your picture has been trimmed much it will be necessary to trim the tissue to fit the print.

LOIS EARLE. — **The Lantern-Slide-Binder** about which you ask is of English make and is called "Silke-

teen." It is very thin but made of a strong silk-like material. It does not curl up when wet as does the black cloth binding, so it is much easier to manipulate. It smooths into position very quickly without wrinkles, and being of a flesh color gives a place on which to write the title or to note anything which one desires to remember in regard to the slide.

B. N. II. — To get a **Red Tone on Bromides** use a copper toning-solution. A good formula is as follows:—Potassium citrate, 1/2 oz.; copper sulphate, 28 grains; potassium ferri-cyanide, 23 grains; water, 5 oz. Do not make the print any deeper than wanted when finished, develop, fix, and wash, then tone in the copper solution till the right color is reached, remove, wash and dry. Do not leave it very long in the washing-water. It is better to rinse the print in four or five changes of water than to let it soak for any length of time.

WILLIAM G. II. — A **Restraint** is a chemical which is used to check or retard the rapid action of a developer. Potassium bromide is the restraint most in use. By diluting a developer one also can retard its action, and for most exposures the dilute solution brings out a better negative than does the full strength developer to which the bromide has been added.

II. J. KANE. — To **Remove Silver-Stains from your Negatives** soak them for ten minutes in a solution of potassium iodide, twenty grains to each ounce of water. Rinse from this solution and then immerse them in potassium ferri-cyanide made of thirty grains to each ounce of water. If the stains are old and therefore obstinate take a piece of absorbent cotton, dip it into the solution and rub the stains. Protect the fingers with rubber tips, for the cyanide solution is poisonous if one has an abrasion on the skin.

TERESA ORVILLE. — **Do Not Back your Plates.** Use the non-halation or double-coated plates, which are prepared to prevent halation. The exposure may be about twice as long as with the ordinary plate. No, we do not accept **Blue-Prints** in the competitions and each of your prints must be mounted and bear on the back your name and full address. No; **enlargements** do not have the preference when awarding prizes. The prize is quite as likely to go to a small as to a large picture, and does if the smaller picture has the best points. Size does not count for anything. The print which you enclose would make a good enlargement, as it has excellent detail. For an article on **intensifying negatives and prints** see PHOTO-ERA for January, 1910.

MOLLIE D. — **Onionskin Paper** is the paper you want for attaching to the back of a negative for retouching or remodeling purposes. This paper is free from defects such as appear in the ordinary tissue-papers. Apply a little paste at each end of the negative, moisten the paper, lay it on the glass and smooth out any air-bubbles or wrinkles. When it dries it is perfectly smooth and tight and may be worked on with a soft lead-pencil or a crayon. One advantage of this manner of retouching a negative is that if the work is not successful it is easily eliminated and a new piece of paper substituted. It is also good for thin negatives, as it holds back the printing and thus one gets greater depth in the print.

HARRY T. J. — **The Reason Why Your Prints Show Uneven Toning** is because you tone too many at a time and the prints stick together, preventing the even action of the toning-solution. Prints should always be moved about during the toning-process, taking a print from the bottom and laying it on top and continuing to do so till the prints are all toned. Each print thus gets an even action of the solution. If, before toning, you place your prints in a salt-and-soda bath, they

will tone more evenly. The bath also enriches the color of the print. The proportions are as follows:—Salt, 1 oz.; sodium carbonate, 1/2 oz.; water, 10 oz. Leave them in this bath five minutes, then tone.

C. H. E. — A **Photographic Magnifier** is simply a **Supplementary Lens**. It is a thin convex lens placed in front of the ordinary lens of a camera of the fixed-focus type. This supplementary lens shortens the focus of the lens in the camera and enables one to get nearer the object to be photographed and get a larger image, enabling one to do portrait-work.

J. L. THOMAS. — To **Preserve Gum-Bichromate Solution** use carbolic acid. One drop to four ounces of the gum-solution, if the liquid is put into a clean bottle and tightly corked, will preserve the solution for months. If it is not to be used for some time, melt a little paraffine wax and pour it over the cork.

S. F. SELDEN. — A **Formula for Amidol Developer** to be used in developing bromide-prints is made as follows:—Sodium sulphite, anhydrous, 325 grains; potassium bromide, 5 grains; amidol, 25 grains; water, 10 oz. Dissolve the ingredients in the order given. This developer must be used within twelve hours after preparing, as it does not keep well in solution. One way to do is to make up the ingredients into powders, making the proportions as given above. Then, when ready to develop, dissolve the powders in the water. Each ingredient should be wrapped by itself and the papers should be of different colors so that one may know which each paper contains, or they could be numbered, 1, 2, and 3, and dissolved in the order of numbers. This developer gives a fine black and makes a clean bright-looking print. It is a great favorite with the best bromide-workers.

MARK J. J. — Yes; you can buy **Enamel for Renameling your Trays**, and can make them quite as good as new. It may be had of any dealer in photographic goods. One kind is used for trays, hypo-boxes, etc. Another kind is used for trays, tanks, painting darkroom-walls, waterproofing home-made trays, wooden boxes, and sinks. The article to be enameled must be perfectly clean and after coating must be set to dry for at least 24 hours. A week would be better, as by that time the enamel would be perfectly hard. The price of the first-mentioned preparation is 25c. per half-pint; for the other it is 65c. for a pint.

A. L. T. — **The Different Lead-Salts Used in Photography** are the acetate, chromate and nitrate. Lead acetate is sugar of lead, and is used for toning- and fixing-baths and has also been recommended as an eliminator of hypo but has never been found very efficacious. Lead chromate is used to color fabrics for darkroom windows. Lead nitrate is used in certain processes of intensification; to make the silver-bath for negatives more sensitive; and is also used in the combined fixing- and-toning bath. Lead acetate combined with potassium ferri-cyanide makes a powerful intensifier.

FRANCES L. — To make a **Liquid Glue** which will always remain liquid, dissolve the best quality of glue in acetic acid. One ounce of glue to two of the acid makes a thin glue which is smooth and fine.

D. H. GROVES. — By "**Actinic Light**" is meant the rays of light which act chemically. The colors of actinic light are the ultra-violet, the violet and the blue rays. Any substance which is light-sensitive is affected by these rays. They are what make our photographs, silver bromide being the most sensitive chemical substance, and therefore used for coating the photographic plate. In former numbers of PHOTO-ERA the action of light has been explained, so if you wish more detailed description, enclose stamps for the number to the Boston office and it will be mailed to you.

Print-Criticism

Address all prints for criticism, enclosing return postage at the rate of one cent for each two ounces or fraction thereof, to ELIZABETH FLINT WADE, 743 East 27th St., Paterson, N. J. Prints must bear the maker's name and address, and should be accompanied by a letter, sent separately, giving full particulars of date, light, plate or film, stop used, exposure, developer and printing-process.

CHERRY-BLOSSOMS. S. S. G. — This picture shows a long row of young cherry-trees white with blossoms. It is rather difficult to photograph trees in blossom so that they look like blossoms and not like trees covered with popcorn. The artist has succeeded very well, however, in this respect, and the trees with their blossoms are very well modeled, but, alas for the artistic beauty of the picture! the sky itself is whiter than the blossoms, and by placing the picture a short distance away, just enough to lose the detail, we find it divided exactly in half, one-half being the white sky and the other half the row of cherry trees, which look like pepper and salt. If only the sky had been full of fleecy clouds one would have liked to keep this picture instead of returning it to its owner. This print, too, is mounted on a commercial mount. Why not the amateur go to the wholesale paper-house and get a bundle of cover-papers in neutral tones and use them for mounts? Although they are more artistic they are also much cheaper than the commercial mounts.

CAROLINE. S. E. H. — This picture is intended to give the impression of an old-time portrait. The subject wears a scoop-bonnet tied under her chin and with flowers inside the brim. She has on an old-fashioned shawl with a fancy border, the foundation of the shawl being a fine checked pattern. The shawl is pinned with a cameo pin. She wears black lace mitts and lace undersleeves partly cover the hands. All that shows of the gown is a long "V" at the neck, but this is fastened with good-sized black ball-button. The background is a paper with a conventional figure and far enough away to be out of focus and therefore does not obtrude itself on the eye but seems a pleasing accessory. In some respects this picture is admirable. The pose is good and the figure well placed on the plate. The arrangement of the costume leaves something to be desired. The buttons should have been removed from the dress, for they catch the eye the first thing, being black, while the rest of the picture is in soft halftones. Then, if the cameo pin which fastens the shawl had been placed at the neck of the dress, and the shawl instead of being drawn about the figure tightly had been let fall in easy folds, the artist would have had something to break the plain expanse of black-and-white check. The lighting could also be much improved. As it is, the lighting is flat, showing that it comes almost directly from the front, and the face is very poorly modeled in consequence. The strongest highlight is on the white lace of the undersleeves. The lower part of the figure should have been kept in shadow and the light concentrated on the face. If the artist will make another study with these same accessories and alter the lighting and the arrangement of the costume he will make a picture really worth while.

THE BUNKER SHOT. L. G. D. — This picture is a pretty good illustration of the subject, but not of special interest to those not interested in the game of golf. It is a good picture for a sporting-paper, for the technique is good and the amateur has made the exposure at just the right moment to show the ball, the flying sand, and

dirt, and other refuse which composes the bunker. In this case the ball has been "faked," though it has been well done. The sensitive plate is not usually quick enough to retain the image of the flying ball, for it travels with immense speed and would in any case appear as an elongated streak in the print. By the use of a little non-actinic paint the golf ball is introduced and completes the picture. For a sporting-picture, this is very good in technique, the auspicious moment of exposure, and in its illustrative value for this sort of shot.

AN OLD STORY. W. I. R. — This picture shows a girl sitting at a table reading from what is evidently an old book, for the edges are tattered and the book looks as if it had seen hard service. It may be one of the modern "best sellers" which has proved so absorbing, but we will give our artist the benefit of the doubt and believe that it is really an old, old book. The lighting in this picture is very good, for it is concentrated entirely on the face and the book, while the hand in the lap, partly in shadow, gives just the right balance for the two spots of light. The faults with this picture are that there is too much foreground, and that it lacks all detail. It is in such deep shadow that one has difficulty to determine where the floor ends and the figure begins. If the print was trimmed at the bottom at least an inch or more, the figure would be in good proportions. As it looks now, the body seems from the waist down to take up over half of the picture, while the part from the waist up takes up less than a quarter of the length. One cannot help wondering how the subject would look if she stood up. The print is in brown mounted on gray. It needs to be transferred to a light cream to bring out detail in the shadows.

THE CLAMMER. A. N. C. — This is in some respects a very good seashore-study. The sky and water have been well rendered; and drawn up on the beach in the foreground is a boat with its sail spread to dry. The shadows are soft and the halftones very pleasing, but the clammer, alas! is so small that one has to look twice to see him. Instead of being the principal object, as one would infer from the title, the poor fellow is really the most insignificant object in the picture. All that this picture needs is to have its title changed to "Along Shore" or "Low Tide" or something similar. With its present title, it might pass for one of the puzzle-pictures in which one is directed to find certain figures cleverly concealed in the lines of the drawing. This print is mounted on a cream paper. A gray the tone of the middle tones of the print would bring out the picture better and brighten it very materially.

Training the Power of Observation

ONE of the most valuable things about pursuit of photography — aside from the button-pushing of the raw beginner — is that the deeper one gets into it the more keen one's power of observation becomes. The careless worker finds himself balked at every stage of the process by faults in his pictures, due, generally, to failure to observe the commonest precautions in composition, exposure, developing and printing. The earnest camerist, however, learns to avoid the many pitfalls in his way because he studies out the reasons for failure and provides against them in future. Now, while this is true of the picture-taker, we are sorry to record that our friends in the trade are not always so observant. For instance, some of them have not yet made the discovery that this magazine ceased to be published by the PHOTO-ERA Publishing Company in August, 1906, and still address letters intended for us to the defunct corporation. Evidently, they never take the trouble to read the contents-page of the magazine. Letters should be addressed to PHOTO-ERA MAGAZINE or to Wilfred A. French.

[Some Exposure-Considerations]

ONCE in a while we receive a letter from some user of our tables complaining that he has got overexposure by giving the time called for on the opposite page. Without seeing the negatives, it is of course impossible for us to advise such a complainant further than that our Guide is merely as basis for trial. Different workers' ideas of overexposure vary widely, but we think that the best definition of a *properly-exposed* plate is that it shall have received so much exposure that on development there will be no *clear glass* except in the very deepest shadows. We are well aware that some workers, accustomed to snapshooting and enamored of contrast negatives, are frightened almost to death when they get a fully-timed plate; but they are in no wise bound to give the full time if they prefer clear glass and soot-and-whitewash prints. The exposures in the tables are intended to give a maximum light-action rather than a minimum. Shutters vary so enormously in speed and in efficiency that it is quite possible to set to much higher speed-markings and still get plenty of exposure. This variation is noted in the small type under the tables. For example, a marking of 1/100 may give an actual speed of 1/32. The only way to be sure is to test the shutter. We recently published an article on a simple method of testing, and we should think that every earnest worker would find it a real pleasure to

ascertain the actual speeds at which his shutter works.

Another reason why we recommend exposures on the full side is that it is easy to restrain a plate which has received ample time, but impossible to develop detail which has not been impressed on the sensitive coating. Then, too, plates are seldom of uniform speed from batch to batch or even within the same batch, and the difference may amount to 200 per cent on either side of the average. It is, evidently, a hopeless task to keep track of these variations for all the plates on the market, but fortunately a slight variation amounts to nothing in practice. One English maker, for instance, marks his plates with the exact H. and D. numbers and is constantly receiving complaints because an emulsion may fall 10 or 15 units below the last batch—a difference which is quite negligible!

The influence of altitude, particularly in a dry atmosphere several hundred miles inland, may well render it possible to cut the exposures in half. The best plan is to expose several plates on an average landscape, giving exposures on both sides of those called for, and note which gives the negative which suits you best; then allow for the difference in your subsequent work.

P.S. With an expensive shutter recently tested, we got the following readings: 1/5 = 0.3; 1/2 = 0.49; 1 = 0.515 sec. See also the review of Mr. Watkins' "Photography" in this issue.

Plate-Speeds for Exposure-Guide on Opposite Page

Class 1/3

Lumière Sigma

Class 1/2

Barnet Super-Speed Ortho
Hford Monarch
Seed Gilt Edge 30

Class 3/4

Barnet Red Seal
Defender Vulcan
Hford Zenith
Imperial Flashlight
Eastman Speed-Film
Seed Color-Value
Wellington Anti-Screen
Wellington Xtra Speedy

Class 1

American
Anso Film, N. C. and Vidil
Barnet Extra Rapid
Barnet Ortho Extra Rapid
Barnet Studio
Cramer Crown
Defender Ortho
Defender Ortho, N.-H.
Ensign Film
Hammer Special Extra Fast
Imperial Special Sensitive
Imperial Non-Filter
Imperial Orthochrome Special Sensitive
Kodak N. C. Film
Kodoid
Lumière Film and Blue Label
Magnet XXX & Colo-Non

Premo Film Pack

Seed Gilt Edge 27
Standard Imperial Portrait
Standard Polychrome
Stanley Regular
Wellington Film
Wellington Speedy
Wellington Iso Speedy

Class 1 1/4

Cramer Banner X
Cramer Instantaneous Iso
Cramer Isonon
Cramer Spectrum
Eastman Extra Rapid
Hammer Extra Fast
Hammer Extra Fast Ortho
Hammer Non-Halation
Hammer Non-Halation Ortho
Seed 26x
Seed C. Ortho
Seed L. Ortho
Seed Non-Halation
Seed Non-Halation Ortho
Standard Extra
Standard Orthonon

Class 1 1/2

Cramer Anchor
Lumière Ortho A
Lumière Ortho B

Class 2

Cramer Medium Iso
Hford Rapid Chromatic
Hford Special Rapid
Imperial Special Rapid
Lumière Panthro C

Class 2 1/2

Barnet Medium
Barnet Ortho Medium
Hammer Fast
Seed 23

Class 3

Wellington Landscape

Class 4

Stanley Commercial
Hford Chromatic
Hford Empress
Cramer Trichromatic

Class 5

Cramer Commercial
Hammer Slow
Hammer Slow Ortho
Wellington Ortho Process

Class 8

Cramer Slow Iso
Cramer Slow Iso Non-Halation
Hford Ordinary

Class 12

Cramer Contrast
Hford Half-tone
Seed Process

Class 100

Lumière Autochrome

Exposure-Guide for November

Calculated for Full Exposure of Shadow-detail, 42° N. Lat. at Sea-level.

Exposure for average landscapes with light foreground; river-scenes; figure-studies in the open; light-colored buildings and monuments; wet street-scenes, with stop F/8 (U. S. No. 4) on Class I plates.

Hour	Bright Sun	Cloudy-Bright	Cloudy	Dull	Very Dull
11 A.M. to 1 P.M.	1/32	1/16	1/8	1/4	1/2
10 A.M. and 2 P.M.	1/25	1/12	1/6	1/3	2/3
9 A.M. and 3 P.M.	1/12	1/6	1/3	2/3	1 1/3

For other stops multiply by the number in third column.

F/4	U. S. 1	× 1/4
F/5.6	U. S. 2	× 1/2
F/6.3	U. S. 2.4	× 5/8
F/7	U. S. 3	× 3/4
F/11	U. S. 8	× 2
F/16	U. S. 16	× 4
F/22	U. S. 32	× 8
F/32	U. S. 64	× 16

The exposures given are actual — not nominal shutter-speeds. With some shutters, 1/100 = 1/40 to 1/60; 1/50 = 1/30 to 1/60; 1/25 = 1/15 to 1/30; 1/5 = 1/2 to 1/10, etc. If you do not test your shutter, you will have to learn by experience which speed-marking to use. Exposure may often be better regulated by changing the size of the stop than by altering the speed of the shutter. With focal-plane shutters, give 1/3 to 1/6 the indicated exposure. No manufacturer can make plates *absolutely* uniform in speed, but a given brand will average about as listed in our tables.

SUBJECTS. For other subjects, multiply the exposure for average landscape by the number given for the class of subject.

1/8 Studies of sky and white clouds.

1/4 Open views of sea and sky; very distant landscapes; studies of rather heavy clouds; sunset and sunrise studies.

1/2 Open landscapes without foreground; open beach, harbor- and shipping-scenes; yachts under sail; very light-colored objects; studies of dark clouds; snow-scenes with no dark objects; most tele-photo subjects outdoors; wooded hills not far distant from lens.

2 Landscapes with medium foreground; landscapes in fog or mist; buildings showing both sunny and shady sides; well-lighted street-scenes; persons, animals and moving objects at least thirty feet away from the camera.

4 Landscapes with heavy foreground; buildings or trees occupying most of the picture; brook-scenes with heavy foliage; shipping about the docks; red brick buildings and other dark objects; groups outdoors in the shade.

8 Portraits outdoors in the shade; very dark near objects, particularly when the image of the object nearly fills the plate and full shadow-detail is required.

16 Badly-lighted river-banks, ravines, glades and under the trees.

32 Wood-interiors not open to sky and with dark soil or pine-needles.

48 Average indoor portraits in well-lighted room, light surroundings, big window and white reflector.

PLATES. When plates other than those in Class I are used, the exposure indicated above must be multiplied by the number given at the head of the class of plates.

THE CRUCIBLE

A MONTHLY DIGEST OF FACTS FOR PRACTICAL WORKERS

With Reviews of Foreign Progress and Investigation

Conducted by MALCOLM DEAN MILLER, A.B., M.D.

Readers are encouraged to contribute their favorite methods for publication in this department
Address all such communications to The Crucible, PHOTO-ERA, 383 Boylston Street, Boston

The Lumière Quinone-Intensifiers

THE LUMIÈRES, as reported in *The British Journal of Photography* for June 16, have recently taken out a British patent for a new process of intensifying negatives. The substances concerned will doubtless be put upon the market before long; but the following account may be of interest.

Benzoquinone is made up according to this formula :

Water	100 cc.
Benzoquinone	0.5 gm.
Potassium bromide	2.5 gm.

in this bath the blue-black silver image of the negative turns gradually to a brownish-red color. The substance formed by the reaction is probably oxy-bromide of silver. After a rinsing, the plate is cleared by immersion in water, two parts, ammonia-water, one part.

The second method involves the use of the sulphonic derivative of quinone; for example, benzoquinone-sulphonate of sodium. In this case, the color of the intensified image varies from brownish-red to orange, according to the strength of the bath in sulphonate from 1 to 5%. A treatment with ammonia-water, as before, completes the process. The patentees state that this process has the following advantages over that in which mercury bichloride is used: It produces intensification with a single solution which permits direct following of the process, so that the increase of contrasts may be regulated; the intensification is unchanged by prolonged washing; direct sunlight has no effect on the color if the ammonia clearing-hath has been used.

Improvements in Ozobrome

MR. THOMAS MANLY, the inventor of Ozobrome, has contributed to *The British Journal of Photography* a paper dealing with the recent advances made in his process. The new acid-bath is :

Water	25 ounces
Chrome alum, C. P.	3 drams
Acid potassium sulphate (NaHSO_4)	1 dram
Citric acid	25 grains

or, for a simpler and very useful formula :

Water	25 ounces
Chrome alum	3 drams
Citric acid	90 grains

The second bath is particularly adapted to give a fog-free result from flat, overexposed bromides.

Regarding the time of immersion in the acid-bath, Mr. Manly makes the following suggestions :

Deep black prints obtained by using a fairly strong developer without bromide should be treated for from 15 to 20 seconds.

Gray prints produced by a diluted developer with bromide should be bathed about 10 seconds.

Greenish or brownish bromides and all gaslight-prints should be treated for from 6 to 10 seconds only.

"Artura-Method" Sepias

ONE of the sensations at the conventions this season was the new hypo-alum hath with gold, by means of which sepia tones on Artura may be produced with an ease and certainty hitherto lacking. It is stated that with this hath it does not matter about the exact tone or color of the original black-and-white print — they will all make good sepias. Even toning of the deposit and greater transparency in the shadows are claimed as well.

Dissolve 8 oz. of hypo in 128 oz. of boiling water. Then add 2 oz. of powdered alum. After this is dissolved, add 2 oz. of sodium phosphate. Next dissolve 60 gr. of silver nitrate in 1 oz. of water and 180 gr. of potassium bromide in 1 oz. of water. Pour the bromide solution into the silver solution and add the mixture to the bath. Stir the solution constantly while adding the various chemicals. Last, add gold chloride, 8 gr.

The right temperature for the bath during toning is between 110 and 120°. It is stated that the tones will be uniform while the bath remains at a constant temperature, but can be varied by using different degrees of heat, up to 140 or 150°.

A Modified Pyro-Metol

SOME time ago I recommended the "Imperial Standard" Pyro-Metol formula for short exposures. I repeat the advice, but I have found a modification advisable for plates which are not undertimed, because the absence of sulphite of soda gives so yellow an image as to exaggerate contrasts. Recalculated and arranged for equal quantities of the two reducing-agents, my modification is :—

A.—Water to	16 oz.
Metol	30 gr.
Potassium metabisulphite	30 gr.
Sodium sulphite, anhydrous	480 gr.
Pyro	30 gr.
Potassium bromide, 10 per cent	60 min.
B.—Water to	16 oz.
Sodium carbonate, anhydrous	1 oz.

For use, take 1 oz. A, 1 oz. B and 1 to 2 oz. water.

This solution works well on several brands of plates and gives soft, well-balanced negatives.

A New Glycin Tank-Formula

At the Bridgeport Convention the following formula was distributed by Schering and Glatz :—

Water	120 oz.
Sodium sulphite, anhydrous	1 oz.
Sodium carbonate, anhydrous	4 oz.
Glycin	1 oz.

For use, dilute 1 part with 10 of water and develop for 20 min. at 70°, for 25 min. at 65° or for 30 min. at 60°. After development, wash the plates thoroughly before fixing to prevent the formation of indelible stains.

BERLIN LETTER

MAX A. R. BRÜNNER

IN no country are more books published every year than in Germany, and it is hard to find a subject about which no literature exists. The writer has just received a directory of studios, photochemical institutes, picture-printing shops, factories, and stores dealing with photographic articles throughout the empire. These addresses have been collected with great care and diligence; they are as complete and correct as possible. The kind of photographic business is always stated, such as taking portraits or landscapes, reproductions, industrial or commercial subjects, etc. The remark that a firm takes portraits in the home of the customer is rather seldom found. To make this book a handy guide for the professional as well as for the amateur, a classified list of every conceivable article needed by them is given. In the third part we find an alphabetical list of no less than 2271 smaller places, where photographic shops are located. From this one can judge how many firms are mentioned. In the last of the seven departments all principal clubs, societies and journals are named.

Most readers will remember the large International Photographic Exhibition which was held for the whole summer-season two years ago at Dresden. In that beautiful Saxonian capital and on the same spot, the International Hygiene Exhibition is now being held. It will last far into the fall. Of course it is at least twenty times larger and the most remarkable event this year in the whole German empire. It is no wonder that Germany again started and executed this idea, as scientific and sanitary matters are fostered here more thoroughly than anywhere else. The whole material is shown in no less than forty halls, while over a dozen foreign nations have their own palace, as they had at St. Louis in 1904 and at Chicago in 1893. It is astonishing how immense the field of hygiene is and in how many ways it affects various trades, industries and our daily life. We know that the art of photography has helped very materially in anatomical researches, in locating diseases, isolating bacilli, etc., and it has been therefore given a prominent place at the Dresden Show. Our large firms making a speciality of apparatus for medical and general scientific photography, marvels of ingenious design and accurate execution, are fully represented. Although these are housed in a separate hall, that of medical apparatus and instruments, the photographs are scattered all over the exhibition-grounds, and in every pavilion you find on the walls and in albums photograms showing exterior and internal parts of the human or animal body, of every conceivable organ in normal or diseased conditions, bacteria, the various processes of well-known diseases and their effects upon the numerous organs, such as cancer, tuberculosis, scarlet and yellow fevers, measles, syphilis and what not. As portions of the body cannot be placed on view in the original condition, and wax-models are too expensive, photograms are indeed an ideal means of demonstrating. I spent several days in this exceedingly instructive exhibition and viewed many thousands of pictures. Besides, lectures are given daily every hour with lantern-slides and sometimes motion-pictures, which treated the various sanitary subjects much better than a book. In this field photography is superior to painting and similar ways of reproduction. Here no room is left for fancy, as the camera says the absolute truth, which is here of the utmost importance. In the medical papers and books, woodcuts and other old-fashioned ways of illustrating reading-matter are no longer to be found, as

an object must be shown exactly in accordance with its condition. But even things not noticeable to the human eye can now be traced by the camera, owing to the magnifying power of the lens and the considerable color-sensitiveness of the plate.

This important peculiarity of photography is much utilized by the criminal police, and examples of the astonishing results were shown two years ago in the Dresden Photographic Exhibition. I had a chance to see several really remarkable demonstrations by Professor Reiss. We were called upon to trace some blood stains in a white handkerchief washed with soap. The cloth was perfectly clean and it was impossible even for the best eye to discover any spot. A chemical would be useless, as one would not know where the suspected stains are located. We took a picture through a dark-blue filter with a color-sensitive plate and really noticed some stains on the photographed cloth. The portion in question was cut out and put into some delicate chemical solution, by which the stain was proved to be caused by blood. This experiment formed the main evidence for the verdict given by the criminal courts. In another case a person was suspected to have forged banknotes and the police, on searching his shop, found some lithographic stones freshly ground. The usual methods for getting out drawings upon such stones proved a failure. Only when these stones were photographed with a good lens after being treated by some chemical, the faint picture of a banknote appeared and the person in question was arrested. Curiously enough, under this drawing another one, twenty years old, made its appearance, which had never been noticed, not even by microscopes. In books containing colored plates, pieces of tissue-paper are usually bound in to protect them. I know of a case where a man tore a fine colored plate out of a book in a public library. The book was out of print and efforts were made to obtain another copy. At last the tissue-paper opposite the torn page was photographed through a blue filter, and through the successive making of lantern-slides the valuable painting, almost given up, was obtained. The grease of the printing-color had partly penetrated the tissue-paper and caused thereon, in the course of years, through oxidation, a very faint yellow color absolutely imperceptible to the human eye. Later on, in the room of the thief, the original was discovered, and a comparison of the latter with the picture obtained from the tissue-paper showed that all details had come out well.

I will close these examples of the enormous value of photography as a means of identification by reporting the case of a drowned person. It was uncertain whether he had committed suicide or was the victim of some criminal. The neck of the dead body was photographed, and, to the astonishment of everybody, strangulation-marks appeared, proving that the poor man was first strangled and then thrown into the water to deceive the police. With the eye alone, nothing could be observed. These examples could be indefinitely increased and similar cases be mentioned.

Looking Ahead

"My dear," says the husband, as his wife comes to join him for a walk, attired in her hobble skirt, basket hat, and other things of the present mode, "I want you to come to the photographer's and have your picture made as you are."

"Why, do you like me so well in this costume?" she beams.

"Well, my idea is that two years from now I can show you the picture, and you will say the things about it that I would like to say about your appearance just now." — *Life*.

OUR ILLUSTRATIONS

Edited by WILFRED A. FRENCH

THE initial picture this month is a beautiful example of animal-photography. How often and how unsuccessfully the defenceless family-pet has to submit to the caprices of the new devotee of the camera is known only to the photo-finisher. These innumerable efforts to capture its portrait are stored away in the closet with the family-skeleton. It is only the skilled camerist who excels in animal portraiture, for he realizes the difficulties which attend this delightful specialty. The edition of PHOTO-ERA in which Mr. Wierum's charming animal-study was first published—three years ago—has long since been exhausted, and numerous inquiries for copies seem to justify its use as a cover-design for this magazine. Every lover of the Saint Bernard will admire this superb picture. Mr. Wierum has displayed fine artistic judgment throughout—from the pose and illumination to the completed enlargement. Data: exposure in the open; May, bright light; lens at F/11; 1/100 second; Standard Ortho; No. 2 developer; bromide enlargement, redeveloped.

Although the pictures of the London Salon, which appear in this issue, are cared for by the author of the article on that subject, brief reference here may not be out of place. The monumental fountain, erected to the memory of the ill-fated Girondists, at Bordeaux, is classed among the finest structures of the kind in the world. The spirited action of the mythological sea-horses and the imposing character of the entire group have been capably rendered by the master-camerist, R. Lincoln Cocks. See frontispiece.

On account of the extremely high artistic standard adopted at the London Salon of Photography an adequate knowledge of this phase of the exhibition will be appreciated by the readers of PHOTO-ERA. The marine-studies of F. J. Mortimer have engaged the attention of photographers and painters throughout the world, for he is recognized by experts as a masterful interpreter of the beauty and mystery of the sea. The London Salon contained a goodly number of prints in his best vein—no old war-horses, but recent examples of his bold and distinctive skill, thus showing a praiseworthy desire to continue an artistic activity at once progressive and sound. As a master-worker in bromide he has few peers; and how he finds time in addition to his arduous editorial duties to engage in so much serious and productive technical work, only he himself can explain. What we have said here in reference to Mr. Mortimer's artistic activity applies in full measure to the prints reproduced on pages 222, 223 and 225.

The unique and harmonious design for the poster of the London Salon of Photography, by Bertram Park, page 224, which was employed with excellent effect by the management, and which was used also to embellish the front cover of the Salon-catalog—may be studied with profit by directors of photographic exhibitions in other parts of the world, particularly in America. It is not that we lack talented designers among our pictorialists—far from it; the matter has simply been neglected. In a country having a concentrated population like that of England, where the members of an organization are not so widely separated as in the United States, matters of importance can be discussed with comparative ease, and quick and harmonious action is ensured. All the same, American photographic societies should not be slow to consider the adoption of good ideas whenever they are presented.

The study in chiaroscuro, by R. M. Cocks, page 226, is intensely bold, vigorous, and effective. As an arrangement it is amazingly well balanced, and the shadow of the principal figure lends itself very conveniently as a solid base. Usually pictures of Oriental bazaars and displays of native merchandise suffer by bewildering multiplicity or heterogeneous confusion of objects. Here, however, the artist has discriminated wisely and has produced a picture of effective simplicity and power.

"The Tudor Dress," page 227, proved of peculiar interest to Englishmen on account of the coronation festivities which had occurred a few months before the opening of the Salon. An episode of that brilliant event was the exhibition of historical costumes, shown on this occasion by handsome young women models. In the absence of information regarding Mr. Park's beautiful picture, we are justified in assuming that it is a memento of this interesting coronation-feature. In spite of the high key of the print, the flesh-tones are commendably lower in tone than the highest lights.

In "The Approach of Evening" William H. Kunz again demonstrates his sterling worth as a pictorialist. The subject was found in the Back Bay Fens within a mile of the PHOTO-ERA office and was passed by as not worthy a plate by members of a noted camera club who had volunteered to guide Mr. Kunz through the Fens. Skilful handling of the masses, perfect composition, and beautiful rendering of planes are some of the outstanding merits of this work. Data: 5 x 7 Long-Focus Cycle Graphic; Spencer Port-Land lens of 9 1/2-in. focus used at F/7; July, 5:30 p.m.; sun low down behind trees; Standard Polychrome; 1/2 sec.; Edinol-Hydro, Kunz, for plate and contact-print from enlarged negative on Wellington Bromide. The print exhibited in the Salon is a carbon on blue-black tissue.

Although apparently excessive praise has been accorded to foreign pictorialists in this department, our list of superlatives is by no means exhausted. This issue is proof of the fact that the product of American workers is not to be slighted. For freshness of imagination, strength of creative ability and depth of artistic expression, the work of Paul Lewis Anderson will compare favorably with that of any practitioner on either side of the Atlantic. The portrait, page 233, merits careful study. Its directness and simplicity spell force and characterization. "What Light Reveals," might be an appropriate title for this impressive and alluring portrait-study. Note by what simple and unobtrusive means the principle of balance is here demonstrated! Let the student cover up with a piece of black paper the fingers of the left hand, and note the immediate collapse of the composition. Other and more important details may be found in Mr. Anderson's article, page 230.

The suggestion for a book-plate, page 231, is certainly ingenious and appropriate. It illustrates the fecundity and versatility of the originator's creative bent.

The portrait of Mark Twain, made by the late George G. Rockwood in 1908—in respect to his memory it appears in this issue—has many admirers. Mr. Rockwood wrote the Editor at the time as follows: "I may as well apologize for the bad lighting. I happened to catch him in that pose and dared not move him for fear he would repent his consent to sit. This profile is a wonderful likeness in spite of the error in lighting. It was taken in the middle of the day and with a 3 B Dallmeyer lens, almost instantaneously."



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Doubtless you have many pictures taken this summer of which you are specially proud—pictures taken on dark days or under difficult conditions—speed pictures or some unusually fine portrait or landscape work. Make lantern slides of them—and show them on the screen to your friends. Every

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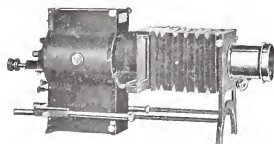
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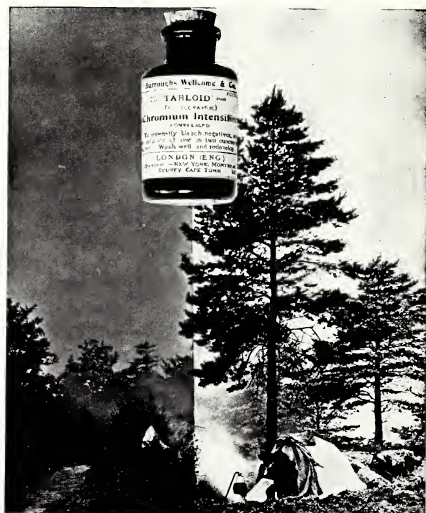
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PHOTO-ERA the Blue-Book of Photographic Advertising

Lovers of operatic music will contemplate with pleasure the charming scene reproduced on page 236. The artists, Hubert Brothers, of Buffalo, have simulated with rare artistic comprehension the interior of an opera-box with two fair occupants who, at the moment, may be listening to the vocal evolutions of the wonderful Tetrizzini or be witnessing the versatile dramatic powers of Maurice Renaud. Or, perchance, they are gazing with wonder upon the Terpsichorean art of Dolores Galli. In any event, the arrangement of the figures, the appearance of profound interest, the artistic prominence given to the principal figure and the delicate effects of light and shade produced by the artificial illumination are worthy high praise. Data: With an honesty that is rare among photographic specialists, the artists volunteer the statement that the picture was made under their own skylight in the daytime, and that it is a straight photograph outside of the background, which has been worked in, probably by the etching-process. Further than this, no details are given.

The picture illustrating Mr. Arthur Hammond's article on the use of soft-focus lenses, pages 238 to 242, bears out the author's contention that the pictorial character of the original scene may be revealed or emphasized by the idealizing potency of the proper lens. Mr. Hammond is not only an exponent of this mode of pictorial expression, but a man of highly-sensitive artistic temperament. His pictures are charming arrangements in thought, feeling and composition. Data: "The Old Wharf" — July, 9.30 A.M.; good light; 4 x 5 Adams Reflex Camera; Smith lens; 11-inch focus; used at F/8; 1/25 second; Wellington Anti-Screen plate; Metol-Hydro; 8 x 10 Wellington Smooth Bromide. "The Water-Front — Gloucester" — July, 6 P.M.; bright evening sun; Spencer Port-Land lens; used at F/4.5; Isos II light-filter; Cramer D. C. Ortho; other data same as preceding. "Around the Grateful Fire" — July, 4 P.M.; diffused light; Smith lens; 11-inch focus, used at F/7; Thornton-Pickard 4 3/4 x 6 1/2 camera; Wellington Anti-Screen plate; Metol-Hydro; Cyko Normal print; exposure made with a Wollensak Skyshade shutter. "Surf at Nahant" — April 11, 11 A.M.; cloudy, no sun; 4 x 5 Adams Reflex camera; Spencer Port-Land lens; 9-inch focus; used at F/6; Wellington Anti-Screen; Metol Hydro; Artura A print. "The Fisherman's Cottage" — Adams Reflex; "Smith" of 11-inch focus used at F/7; July, 11 A.M.; bright sun; 1/50 sec.; Wellington Anti-Screen plate; Metol-Hydro developer for plate and print on Artura A.

Although the St. Paul Convention has passed into history, the demonstrations by the Duehrkoops are among the attendant features which will linger long in the memory. The exposures made by this gifted couple on that occasion did not in each instance represent their highest ability; but some of the negatives made of the handsome wife of Melvin H. Sykes, the eminent portrait-photographer of Chicago, proved to be masterpieces. One of them appears on page 245. Although the conditions of either the Hamburg or the Berlin studio may not have prevailed at St. Paul, this portrait of Mrs. Sykes is an admirable illustration of the Duehrkoop lighting — vigorous, harmonious and designed to emphasize the individuality of the sitter. The pose is superb and, as George W. Harris would say, "It is well balanced in light." Data: Wollensak Optical Co.'s Vitax lens, F/3.8; light from window; about four seconds' exposure; 8 x 10 Hammer Red Label Plate; Hammer Pyro developer, used as given in the "Hammer Little Book" or contained in each package of Hammer Plates, viz: six oz. of water to the one-half oz. of each of the stock-solutions as given; time of development, five minutes; 8 x 10 Professional Cyko print.

Our Monthly Competition

WHATEVER may be the cause, one in a continuous series of competitions will sometimes be a disappointment, either in the number or the quality of the entry. This is the case with the present contest, "Gardens." The entries were numerous enough, but the subjects were not always happily chosen. Undoubtedly, the contestants utilized what was within reach, seemingly regardless of the truth that a solitary bush, however decorative, did not in itself constitute a garden. It would have pleased the jury, and would have resulted in more satisfying awards, had interested Guilders visited some of the elaborate gardens attached to large private estates, which are to be found in the vicinity of nearly every large city, at summer resorts, along the Hudson and in the country. Not even a good example of the old-fashioned garden was included in the large array of prints sent to the Guild Department. We admire the spirit which must have prompted many participants to make the most of what modest material may have been at hand; but the object was to find a suitable theme and to treat it artistically. Let those who would learn why they failed consult the September issue of *The International Studio*, which contains six superb halftone-plates of garden-scenes — magnificent examples of the landscape-gardener's art. Subjects like these, among others, should have engaged the Guilders' attention and, with the exercise of the artistic taste which many possess in a marked degree, the results would doubtless have proved more gratifying.

In the absence of a picture worthy the first prize, we present, on page 248, Edward H. Weston's pleasing impression — quiet, suggestive and not too plainly articulated. The mystery and the gentle touch of morning-light are well expressed. It is an artistic ensemble and owes much of its charm to the somewhat unusual effect of light produced by pointing the camera almost directly toward the sun. Data: August, 1911; light, misty; plate, Orthonon; lens, Voigtlander & Son's Collinear, 7 7/8 inch focus; stop, F/11; exposure, 30 sec.; 7 A.M.; pyro-soda; print, Cyko Plat.; 6 1/2 x 8 1/2 Seneca View-Camera.

In James Thomson's picture, page 249, the objects did not seem to lend themselves to a thoroughly harmonious arrangement. Perhaps the viewpoint adopted by the camerist was the best available. The huge urn seems incongruous and dwarfs the surrounding bushes and plants. The view is manifestly a difficult subject, yet Mr. Thomson has successfully presented the character of an Italian garden in the vicinity of Boston. Data: light, cloudy, "open-and-shut day"; 1/25 second; 5 x 7 Seneca View-camera; R. R. 6 1/2-inch-focus lens; stop, F/8; Pyro; Artura Carbon Black print.

Although Edwin A. Roberts does not fully carry out the spirit of the theme proposed, he has selected a subject which at least suggests the nature of the locality. We feel that we are in a garden and not in an open field or in the woods. His picture is very attractive, the color-values are well-preserved and the angle of the solar rays imparts a sense of solidity and a fine perspective, which are valuable means in the hands of a landscape-specialist. Data: Name of floral bush, "Dorothy Perkins"; July 4, 8.30 A.M.; bright sunlight; 5 x 7 Seneca camera with Seneca Convertible lens, F/8; 8-inch focus, of which the front-lens alone was used; length of focus, 18 inches; Ideal three-times color-screen; six seconds' exposure; Cramer Medinn Iso plate; Pyro; Professional Cyko Buff print, redeveloped.



Correct exposure is all-important for success.

BOOK-REVIEWS

Books reviewed in this magazine, or any others our readers may desire, will be furnished by us at the lowest market-prices.

PHOTOGRAPHY. Its Principles and Applications. By Alfred Watkins, F. R. P. S., Progress-Medallist of the Royal Photographic Society for 1910, Past-President Photographic Convention. Illustrated with frontispiece in three-color from an Autochrome and numerous diagrams and halftones. Svo. 333 pp. New York: D. Van Nostrand Company, 1911.

Something which we have long wished has come to pass, namely, that Mr. Watkins should write a longer and more pretentious book on photography than his well-known and most useful *Mammal*, which as regards the topics of exposure and development is quite the most practical scientific handbook of which we know. The present volume does not pretend to vie in completeness of treatment with such works as R. Childe Bayley's "Complete Photographer," though it touches on every field of work. The chapter-headings will show the wide scope: First Principles; Lenses; Exposure-Influences; Practical Exposure; Development-Influences; Practical Development; Camera and Dark Room [*sic*]; Orthochromatic Photography; Printing-Processes; Hand-Camera Work; Enlarging and Slide-Making; Color-Photography; General Applications; Record-Applications; Science-Applications; Plate-Speed-Testing; Process-Work (Photomechanical-Printing), and Addenda on pinhole-photography and timing development by paper test-slips. (The hyphens are ours.)

The introductory chapter contains a very simple and direct explanation of the principles of light-action which are utilized in photography, the formation of images by both pinholes and lenses, the effect of light on the plate and the influence of exposure, as necessitated by the fact that the plate differs from the retina in its capacity to record images. Mr. Watkins is undoubtedly one of the best photographic pedagogues we have, for he has the art of explaining things so as to be readily understood by the novice. This first chapter is an excellent example of his facility and should be read by every beginner in photography. The chapter on lenses is rather elementary, no attempt being made to mention the lenses of some of the most famous makers, such as Zeiss, Voigtlander, and Steinheil, the writer's bias being for English goods. The treatment of exposure is an expiation of Mr. Watkins's former treatises on the topic, with all the advantages of rearrangement and more logical development due to long experience. As is well known, the use of an actinometer does away with the need of an elaborate classification of subjects such as is necessary with our tables in PHOTO-ERA, so the problem is reduced to its lowest terms, viz., the effect of obstructions to the light illuminating the subject and the application of the meter to varying conditions as determined by this factor. "Practical Exposure" explains the use of tables from the time of Burton and Scott and the various exposure-calculators (sometimes falsely called meters) based thereon, also the application of the exposure-meter to interiors, copying, daylight-enlarging, and other fields. The chapter on development brings in the latest advances in time-development, particularly the use of the time-thermometer with both the Watkins and the Kodak tanks to make accurate allowance for changes in temperature. Short descriptions are given of many little-used printing-processes, so that this part

of the book is valuable for reference. The review of all known processes of color-photography is particularly valuable and due importance is given to the beautiful Autochrome process of the Lumières—a field in which Mr. Watkins has made it possible to secure exact exposure by devising a special calculating-dial and a good means of varying time of development for temperature. Another original recommendation is to copy an Autochrome by contact in the camera with the lens pointing to the sky, also to stop at the negative and print positives by contact on Autochrome plates in cases where many copies are wanted. In other departments the book is quite up to date, including such topics as Kinemacolor, X-ray and survey-photography.

Perhaps the most novel announcement is the one of a new method of speed-testing by the use of a special exposing-disc devised by Mr. Watkins to obviate the plotting or measuring of densities and to indicate the central point of correct exposure. By superimposing in a special instrument two characteristic curves so that the same exposures come opposite to each other, it is possible to determine the "central speed." This method does not give the maximum speed but the one which indicates the exposure yielding the best possible results. Mr. Watkins is inclined to recommend two speed-tests, "the first, made by an observation of the smallest exposure which gives a visible deposit, and to be called the maximum-speed test, being right for snapshot-exposures and advertising; the second, made by the central-speed plan, being right for time-exposures for best results." (Hyphens ours.)

Our own experience with the Watkins numbers on the published speed-cards is that they tend to indicate (for American conditions, at least) the central-speed; though Mr. Arthur Hammond assures us that in England the Bee Meter indicates the minimum exposure which will give a good negative: the topic, however, will be treated fully in an article which will appear soon in these pages.

In conclusion, we recommend Mr. Watkins's book as one which should be purchased and carefully studied by all photographers, professional or amateur. Note should, however, be made of typographical errors in the table on p. 24, in the list of comparative stop-values.

THE INTERNATIONAL STUDIO FOR OCTOBER. Price, 50 cents. Published monthly. Yearly subscription \$5.00, post-paid. John Lane Company, 110-114 W. 32nd St., New York City.

The *International Studio* has come to be recognized as the most superb and highly-educational monthly art-publication in the world. It is indispensable to the art-lover, the connoisseur, the picture-dealer and the art-student. No similar publication can prove a greater source of delight, instruction and information to the photographer, be he professional or amateur. The October number has been produced with a seeming disregard of cost. Certainly no pains have been spared to make this one of the most sumptuous and delectable numbers ever issued by the publishers of this splendid magazine. Lack of space forbids a description in detail of the many important and beautifully-written essays on various important art-topics, and the large number of exquisite and elaborately-executed plates in color and monochrome.

The liberal contents of this number include profusely-illustrated essays as follows: Edwin Austin Abbey, Illustrator, Painter, Decorator, by Arthur Hoeber; Some Recent Portraits by Philip A. Laszlo, by A. L. Baldry; Japanese Art and Artists of To-day, VI, Cloisonné Enamel-work, by Prof. Jiri Harada; Some Notes on the Turin International Exhibition, by Alfredo Melani; The

National Competition of Schools of Art, 1911, by W. T. Whitley; Studio-Talk (from regular correspondents); Reviews and Notices; The Lay-Figure: On Using the Memory; The Lombardy Poplar as a Decoration, by Samuel Howe; A Cheerful Note in Church-Decoration; The First Presbyterian Church, of Watertown, N. Y.; Exhibition of Pictorial Photography by the Newark Museum Association, by William D. MacColl; A Minnesota Country-House.

We call special attention to the profound and dignified review by an eminent art-critic of the exhibition of pictorial photography, which was held by the Newark Museum Association last summer, and which has been referred to several times in the pages of PHOTO-ERA. This is a high tribute paid by *The International Studio* to pictorial photography as a fine art, and should be read by every photographic pictorialist. There are many photographers, both professionals and amateurs, who, at this season of the year, devote sums of varying amounts to combination-subscriptions for popular magazines. We would suggest that they reserve a part of this sum and devote it to a subscription to *The International Studio*, which, at \$5 a year, is emphatically cheap.

BLAETTER UND BLUTEN. Dargeboten von der Redaktion der *Abendschule*. Siebzehnter Band. Zahlreiche Illustrationen. Preis, \$1.25. St. Louis, Mo.: Louis Lange Publishing Co.

Eine Haus- und Familien-Bibliothek in wunderschönen Prachtbänden, voll des mannigfaltigsten Inhalts zur Belehrung und Unterhaltung für jung und alt. Bis jetzt sind 16 Bände, jeder 376 Seiten stark und aufs reichste illustriert, erschienen. Mit jedem Jahre erscheint ein neuer Band.

Sie sind eine reiche Schatzkammer für jedes Haus, für jedes Lesezimmer und bieten eine Fülle des Wissens wie der Unterhaltung dar. Jeder Band enthält eine Reihe sorgfältig ausgewählter oder eigens geschriebener Erzählungen, viele Geschichten und Beschreibungen, Artikel über historische Begebenheiten wie über naturgeschichtliche Gegenstände, Medizinisches, Haushaltsangelegenheiten, Völkerkunde, Sprüche, Rätsel, Jugendfreuden, eine Abteilung für die Kleinen, und so weiter.

Jeder Band bietet dem angehenden Schüler der deutschen Sprache, besonders Amerikaner, eine vortreffliche Gelegenheit leichtes und gewähltes Deutsch zu lesen. Den Lesern der PHOTO-ERA innigst empfohlen.

DER OELDRUCK. Illustriert. Von Dr. Franz Fuhrmann, price 2.80 Reichsmarks (70 cents); postage, 6 cents. Wilhelm Knapp, Halle a. S., Germany.

"The Oil-Print" is the English title of the latest monograph, number 73, in Wilhelm Knapp's admirable *Encyclopaedia of Photography*. Dr. Fuhrmann, the author, and himself an expert oil-printer, has treated this subject in a thoroughly able, intelligent and authoritative manner, going into the smallest detail of the *modus operandi* and illustrating every step of the process with original photographs. All the various working-utensils, materials, etc., are thoroughly described and illustrated so that this valuable treatise may be comprehended even by intending practitioners with a scant knowledge of the German language. The book contains four superb half-tone-reproductions of admirable examples of oil-printing by Dr. Fuhrmann. In truth, this work is the best which has come to our attention, and we recommend it most heartily to our readers.

The volume contains the following chapters: Theory

of the Oil-Print; History and Literature; Materials and Utensils; Technical Operations; Preparing the Paper; Oil-Prints on Glass and Porcelain; Errors and their Correction, and Remarks on the Accompanying Illustrations.

DAS PHOTOGRAPHIEREN MIT BLITZLICHT. Illustriert. Von Hans Schmidt, price 3.60 Reichsmarks (90 cents), postage, 10 c. Wilhelm Knapp, Halle a. S., Germany.

PHOTO-ERA has often expressed the desire on behalf of many interested readers for an authoritative and unprejudiced text-book on the subject of flashlight-photography, in view of the vast amount of inferior and degraded work which is being produced in this country at the present time. The author, a professor at the Photographic Institute of Instruction and Research at Berlin, and an authority of universal reputation, has gone deeply into the subject of flashlight-photography, and has produced a work which, for thoroughness, lucidity, scope and accuracy may be safely regarded as unsurpassed. The author has kept pace with the many improvements in methods and apparatus which have been made up to the present time, and he has incorporated the results of his observations and researches, together with the best knowledge of expert practitioners, in a volume which is indispensable to every flashlight-worker, professional or amateur. We are glad to endorse this work, although we hope to print in an early issue of PHOTO-ERA a valuable, up-to-date article on the same subject by a well-known American authority.

The illustrations, which clarify the text, are quite numerous and in themselves constitute a liberal education in this difficult and important branch of photography. Twenty chapters treat the subjects of illuminating-compounds; ignition-apparatus, both for pure magnesium and flashpowders of various manufactures; pneumatic and electric forms of ignition; panchromatic compounds; elimination and removal of smoke; diffusion of light; choice of lenses and dry-plates; character of subjects; development and exposure, and many other important technical matters.

A Well-Organized Camera Club

We have just received the announcements of the Newark Camera Club, 222 Market St., Newark, N. J. This club is very well organized on much the same ideas as were explained in Mr. Walford's article in our October issue, with six committees, House, Finance, Membership, Entertainment, Lantern-slide and Outing, each consisting of three members. Regular business-meetings are held on the second and fourth Mondays of each month at the club-rooms, which are provided with a large, well-ventilated darkroom; a studio with regular portrait-lens, camera and accessories; lockers; enlarging-apparatus; lantern-slide camera, and a full list of photographic magazines. The regular fixtures of the club include an annual competition for club-medals and other prizes, a lantern-slide exhibition, fortnightly club-suppers, an annual smoker in February, an annual banquet in April, and several outings to points of interest. The dues are \$12.00 per year and there is no initiation-fee. The membership numbers 57.

The Lantern-Slide Committee sends us the following announcement: A lantern-slide competition will be held for sets of four slides, with prizes of medals. Entries close Nov. 13. Interchange slides must be submitted before Dec. 22. The committee will be in session at the club-rooms Thursday evenings to render assistance in making slides to those who desire it. The annual slide-exhibition will be held November 27.

ON THE GROUND-GLASS

Art-Commissioner Eickemeyer

RUDOLPH EICKEMEYER, JR., the prominent photographer, whose exquisite and delicate work is well known to our readers, has been appointed chairman of the art-commission of Yonkers, New York. One of the most important functions of the commission is to judge a competition, just announced, for the decoration of the council chamber in the City Hall. With his keen sense of beauty and wide familiarity with the masterpieces of painting, Mr. Eickemeyer will undoubtedly secure for his city mural decorations far above the average standard of merit for such work. The appointment speaks volumes for the good sense of the executive head of the Yonkers city government.

Submerged, but Saved Camera

R. E. MULLER, official photographer of the U. S. Navy, had a narrow escape from drowning when trying to board the U. S. Battleship Kansas, during the maneuvers of the fleet off Provincetown, Massachusetts, last July. With a suit-case in one hand and a camera in the other, Mr. Muller was stepping from a launch to a sailboat, when the boom of the latter, swerving round, swept him off the deck into the water. Soon the unlucky camerist was seen moving off on a high comber, handling himself well, but firmly grasping his camera; the suit-case he had discarded. In the meantime the port rail of the battleship was swarming with naval officers and handsomely-gowned women, who had suddenly left the pleasures of an afternoon hop to witness the novel and exciting aquatic event. A seaman had been ordered to the rescue of the photographer, but there appeared to be no necessity for the plunge. The waves ran high and the tide was strong, and, though the camera was a manifest handicap, Mr. Muller was master of the situation and declined proffered aid. With powerful overhand strokes he neared the side of the vessel, reached the ladder and climbed aboard. Speaking of his struggle in the water, he said that he would almost lose his life rather than lose his pet camera — one of the reflecting type with focal-plane shutter.

Formation of a New Trust

IN spite of the Government's determination to enforce the Sherman Anti-Trust Law, the merging of business-interests continues apace.

Among the most recent violations of the act is the virtual union of two well-known publishing-firms — *American Photography and Electrician and Mechanic*. In short, Mr. F. R. Fraprie, managing editor of the former, and Miss Mary O. Sampson, proprietor of the latter publication, were married Sept. 16, 1911.

May nothing mar the domestic felicity of these happy young people? If discussions should arise at the breakfast table, regarding the respective merits of their publications, there should be no temptation to substitute for the proverbial heavy biscuit copies of magazines. Any possible differences of opinion might well be settled in their editorial columns.

William H. Zerbe

WE learn with much satisfaction that our good friend Mr. William H. Zerbe has been selected by The Brooklyn Institute of Arts and Sciences to teach a class in photography. We congratulate Mr. Zerbe on the appointment, in which pleasure we are sure his many friends will join

us. We feel sure that the class has some very interesting and profitable work in store for it this fall and winter.

Regarding Subscription-Solicitors

WE have already called attention to the dishonest activities of certain subscription-solicitors who have been operating in various parts of the country, collecting the money for PHOTO-ERA and failing to forward it to us. We have lately learned of another trouble which has annoyed many prospective subscribers. In certain cases, money has been paid for club-offers of photographic magazines, but the agent has held back the orders for several months. In the meantime, the would-be reader has written to us to know why his order has not been filled. It is, of course, evident that we cannot fill orders which we have not yet received. In case of the slightest doubt, therefore, it is best to send the money direct to PHOTO-ERA, whether for this magazine alone or for a club-offer.

A Newark Dealer in Disgrace

AS Newark, N. J., has lately loomed up as a photographic center, it is curious that there should be one dealer in supplies in that city, who insists upon selling chemicals which are unfit for use and which, in several cases, have ruined valuable negatives.

Several complaints regarding the unworthy methods of this dealer have reached us, and we are urged to make his name public. This we decline to do at present.

If, however, he continues to abuse the confidence of practitioners in Newark, be they professionals or amateurs, we certainly shall comply with the wishes of our subscribers.

Publicity-Men at Boston

THE week following the Photographers' National Convention at St. Paul occurred the annual meet of the Associated Advertising-Clubs of America at Boston. These so-called "live wires," although only about one thousand strong, made their presence felt in no uncertain manner throughout the convention-week; and what they did and said was of benefit to the entire country. There are certainly men of real genius among these publicity experts, including L. B. Jones, of the Eastman Kodak Company, who represented the photographic industries. His rival, in another line, viz., Alfred Stieglitz, was looking after his fences in Europe and could not be present.

Mr. Barrows' Trip Abroad

GEORGE L. BARROWS, the energetic and popular manager of the photographic department of the Berlin Aniline Works, New York City, has been spending the summer in France and Germany. He is enthusiastic about the sights of the old world, including those of Berlin, which capital he visited, making an inspection of the immense factory of the Berlin Aniline Works, which is styled "Actien-Gesellschaft Fuer Anilin-Fabrikation," one of the largest manufactories of aniline dyes and photographic chemicals in the world, under the well-known trade-name, "Agfa."

A. H. Hotté

MR. A. H. HOTTÉ, formerly with the C. P. Goerz American Optical Company, has accepted a position as advertising- and sales-manager with the Multi-Speed Shutter Company, of New York City.

NOTES AND NEWS

Announcements and Reports of Club and Association Meetings, Exhibitions and Conventions are solicited for publication

Postal Photographic Club Field-Day

EVER since its inception the Postal Photographic Club has held annual meetings; but, for one reason or another, it has been impossible to obtain a large attendance of members. Some of these outings in the past have been quite successful. At the suggestion of one of the members, a meeting was held at Gloucester, August 13, in which members of the Camera-Craftsmen participated. Thus it was possible to bring together a company of fifteen camerists. The party took the 8.15 train from North Station, Boston, arriving one hour later at Gloucester, whence it proceeded by electric cars to the charming little seaside-resort, Annisquam. Exposures were made of the picturesque views in which Annisquam abounds, and after an excellent luncheon at the Overlook Hotel the camerists proceeded to Gloucester, photographing hits of interesting scenery *en route*. The docks and shipping at Gloucester afforded excellent camera-material, after profiting by which the party left Gloucester at 8 P.M. for Boston.

Among the members present were Mr. Harry D. Williar, Mr. Gordon R. Fisher, Mr. William T. Knox, Mr. and Mrs. J. Will Palmer, Mr. and Mrs. Frank C. Kellogg, Mr. James Dana and Mr. W. K. Menns, of the Postal Photographic Club, and Mr. Albert J. Le Breton and Mr. Wilfred A. French, Ph.D., past presidents of the Club; also Mr. Roy C. Burckes, president, Mr. Sylvan B. Phillips and Mrs. Margaret E. Menns of the Camera-Craftsmen.

Although the party was comparatively small, the occasion was a highly enjoyable one, as it cemented long-existing friendships.

Pittsburg Photographers

At the annual meeting of the Photographic Section of the Academy of Science and Art of Pittsburg, held recently, the following officers for the year were elected:

President, O. C. Reiter; vice-president, W. P. Clyde; secretary and treasurer, Frank L. Miller; print-director, Samuel A. Martin; lantern-slide director, Fred C. Wilharm; executive committee, O. C. Reiter, Frank L. Miller, Thomas Reed Hartley, N. S. Wooldridge and Dr. David R. Breed. Reports of officers were read showing that the organization has had a profitable year and has added a number of new members.

The annual outing of the photographic section was held May 30, at Beaver, Pa., and included a tramp across country.

Jamestown Camera Club

At the fifth annual meeting of the Jamestown (N. Y.) Camera Club held July 11, the following officers were elected: President, A. H. Hooper; vice-president, L. C. Ogren; secretary, R. Sanctuary; assistant secretary, L. Miller; treasurer, E. Sample. A vote of thanks to the retiring officers was unanimously adopted, special mention being made of Mr. Ogren, during whose service as secretary the past two years the club made great progress. The last annual exhibit, in particular, was a great success, owing to his untiring efforts.

Amendment of the rules was also made so that hereafter no initiation-fee will be required. The committee on "The City Beautiful" reported that sixty negatives

have been submitted for lantern-slides, and that many of the members will devote themselves during the summer to securing pictures of the more desirable and picturesque parts of the city. Suitable records of the condition of the streets and yards before and after "Clean-up Week" will also be included. PHOTO-ERA is glad to record activities such as these, which are in line with its established policy to make our art a potent factor in civic betterment.

Union Camera Club

THE regular July meeting of the Union Camera Club was held at its rooms, 48 Boylston St., Boston, U. S. A., July 11. Owing to the extremely hot weather, the attendance was rather small but the occasion was none the less enjoyable. The pictures taken on the July field-day were shown. The first prize for the best group of pictures was captured by Vice-President H. S. Stanley, as was also that for the best individual picture. The Club voted to hold its Annual Exhibition on the first Tuesday in November, the exhibition to be open to members only.

Newton Civic Federation Contest

As its contests, last year, did not bring forth a sufficient number of meritorious prints of the many beautiful features of "The Garden City," the Civic Federation of Newton, Mass., has decided to repeat its offer of prizes. We published two of the best pictures in March, 1911. There will be two classes, landscapes and architectural features, with prizes of \$25, \$15 and \$10. The closing-date will be Nov. 15, 1911.

William H. Rau's New Studio

WILLIAM H. RAU, the noted photographer of Philadelphia, has opened a new studio at 238 South Carmac Street, between 12th and 13th, Locust and Spruce Streets. Here he has a building entirely devoted to photography in all its branches. Mr. Rau's work covers a very wide field. He is perhaps best known as the official photographer of the St. Louis World's Fair, and at present holds a similar position on the Pennsylvania Railroad. His latest development is the field of portraiture of men. Recently Mr. Rau received from the French government the title of *Officier d'Academie*.

Three Fine Enlargements

WE are sorry that our account of the Saint Paul Convention, printed in the September issue, contained but a brief reference to the three large negatives shown by W. S. Lively, of the Southern School of Photography. We can judge the merits of these enlarged negatives only by photographs submitted to us by Mr. Lively. These are matt-surface prints, 4 1/2 x 9 1/2 inches, representing an old man with flowing hair and beard, a young woman arrayed in light-colored garments, and a boy costumed as a young Indian. These pictures represent a very high degree of professional skill, as regards lighting, posing and chemical effect, and are a credit to Mr. Lively's efficient and highly-respected institution.

Los Angeles Camera Club

At the regular meeting of July 26 the time of meeting was, by unanimous vote, changed from Wednesday

to Thursday, effective at once. This change was made at the request of a majority of the members, who found the former day very inconvenient.

The regular outing to Balboa took place on August 6. A fair number of members attended and had a very pleasant day, also obtaining many promising exposures.

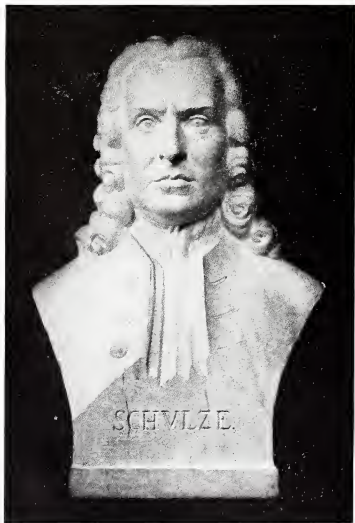
President Bissell and Staff at St. Paul

AMONG the most interested attendants at the St. Paul Convention were Pres. L. H. Bissell, Mrs. Bissell, Prof. David J. Cook and Prof. Felix Raymer. Nothing of importance at any of the sessions escaped the attention of this group of instructors eager to witness improvements in the various photographic processes, operations and inventions, which knowledge they intend to apply to the various departments of the Illinois College of Photography at Effingham, Ill.

Editor Kahn's Birthday-Party

MR. GEORGE KAHN, editor of *Photoisms*, the breezy little monthly which contains the news of The Camera Club, New York City, entertained his family and his friends of the club on the anniversary of his birthday, Sunday, July 30. A goodly number was in attendance to witness the presentation, through Mr. J. H. McKinley, of a floral horseshoe from the club-members. We note among the names of those present that of our friend Mr. C. G. Willoughby, but space will not permit the mention of others.

Dr. Heinrich Schulze, 1637-1744



THE discovery of the sensitiveness to light of silver salts can be traced to the year 1727 and was made by the German physician, Dr. Schulze. But his invention remained without practical use for longer than a century, as a medium to fix the silver picture was found only in 1839. In the same year the first pictures appeared,

made by the Frenchmen, Daguerre and Niépce. The following decades brought wonderful improvements: the paper-photography invented by Fox Talbot; the wet collodion process by le Gray; the color-photography by H. W. Vogel; and at last, at the end of the seventies, the silver bromide gelatine dryplate. The noted Lichtwark goes so far as to say that portrait-photography had a fatal influence upon painting from 1870 to 1890. Miniature portrait-painting and printing have much degenerated through it; in fact, photography has acted rather detrimentally on art; and, after retouching became known, usurped the place of portrait-painting almost completely. It soon reached its zenith, however, and then began to decline. At the end of the past century a new movement affected photography and pictures made by its processes appeared again upon the walls of our rooms.—*Max A. R. Brünner.*

Illinois College of Photography

THE students have organized a permanent athletic club, and have started with a good, strong membership. They are fitting up a gymnasium down-town for winter-work and are looking forward to some good indoor sport.

Jas. H. Smith & Sons Co. of Chicago has installed in the operating-rooms at the I. C. P. one of its perfected Portrait Flash-Cabinets, to be used by the students in their flashlight work. This cabinet is very similar in construction to a single-slant light, with four eighty-candle-power lights for focusing, and a flash-device with electric-battery ignition. It is particularly designed for residence-studios, taking the place of a skylight, thus making it possible to use any building for studio-purposes.

Pres. and Mrs. Bissell have just returned from a month's visit in San Francisco and other points in the West.

We have just received some fine three-color work and an interesting letter from Juan Oswaldo Amat of Guayaquil, Ecuador, student of 1908. He has charge of the engraving and illustrating department of El Comercio Press of that city, and makes it hum.

Mr. M. Ito, of Tokyo, Japan, who has been taking a course in photography the past winter, has left for New York, whence he will sail for Buenos Ayres, where he expects to open a studio.

Mr. Louis Hartwell, class of 1910, has opened a modern studio at Norwich, N. Y., and reports business very good.

A large body of students took advantage of the first mid-week excursion to St. Louis. The dry-plate factories, stock-houses, leading studios, and parks were included in the trip, making it a very busy and interesting day.

The rival baseball teams of the photographers and photo-engravers have played two exciting games since getting their clubs organized and honors are still even, each team having won a match. The next game will be hotly contested, as the rivalry has grown very keen.

B. Y. M. C. Union Camera Club

THE regular September meeting of the B. Y. M. C. Union Camera Club was held on September 5 at the clubrooms, 48 Boylston Street, Boston, Mass.

On September 17 an excursion was made to Beverly, Mass. By special invitation of President Taft a visit was made to "Parametta," the Summer Capital, and the members thoroughly availed themselves of the privilege accorded to take pictures of the beautiful estate.

In the afternoon the members visited the Beverly Yacht Club, where they were royally entertained by the members of the club.

A late train was taken back to Boston after a most enjoyable outing, during which many excellent compositions were recorded by the cameras.

Eben D. Jordan



Copyright, 1910, Marceau

WHEN the curtain goes up on the initial performance this season at the Boston Opera House the onlookers will have an opportunity to witness another step in the advance made in development of grand opera.

The excellence of the performances given by the Boston Opera Company has become known throughout the world ever since the first day of its existence, and it has steadily gone forward until to-day it is looked upon as a model in the world of art.

While the artistic side is due entirely to the tireless efforts of Managing Director Henry Russell, the gratitude of Bostonians is owing to Mr. Eben D. Jordan, who, with a public spirit rarely exhibited in recent years, has not only given Boston an opera house such as probably no other city can boast, but has unflinchingly shouldered the responsibilities connected with making grand opera a necessary adjunct of every-day life in the Hub of the universe. But even before the Boston Opera House was erected, Mr. Jordan's name was familiarly known in the realms of music, for his generosity has won for him a permanent place in the history of the musical development of this country.

The coming year at the Boston Opera House promises to be more fruitful in the artistic sense of the word than the two previous seasons, and those who will have the opportunity to share in the rare enjoyment offered in witnessing these performances will have much for which to thank Mr. Jordan, who is still the prime mover in the affairs of the local grand opera institution.

Garro's American Flag

ONE of the most impressive incidents of the Bridgeport Convention is pictured here. Mr. I. C. M. Stone, a veteran photographer of Brooklyn, N. Y., has long

been an ardent admirer of Mr. Garo's, so he thought the occasion a propitious one to show his appreciation by presenting a flag to him. Mr. Stone spoke as follows:

"President Garo and Brother-Photographers, I have so much in my heart to say that when I get up here I cannot well express myself in words. I am not much of a speaker, but they do say I am a pretty good singer, and the larger the audience the better I could sing; therefore, if I had that which I would like to tell you set to music, I could render it without any trouble to myself and possibly it would be more agreeable to you.

My simple remarks in praise of our most-worthy President are but in vain, for were I to talk for a month, I could not tell you more than you know about him, and we all concede that he is a master and a past-master of our chosen art, so I will not waste your valuable time in



Photo, by Cochran

trying to describe his many good and noble qualities. Now, lots of the Boys here think that because I have carried this extenuated package about with me that I have come to this little island to do some fishing on my own account or that I am going to spring upon them some new kind of flashlamp, but I will prove to the contrary. It occurred to me that I wanted to show to my dear Brother Garo my personal love and appreciation for the noble and indefatigable work that he has done to bring about this ever-to-be-remembered New England Convention of 1911. And I have brought him something — not to hang on his watch-chain, but something that he will, as a loyal American, be ever proud of. I am an Englishman by birth and I love the dear old Union Jack, and as a loyal citizen of this, my adopted

home, I love the dear old Stars and Stripes of this our glorious country, the Land of the Free and the Home of the Brave. [Here he sang 'The Star-spangled Banner' and all the Convention joined in the chorus.] I have, therefore, great pleasure in presenting this flag to my dear and most worthy brother, President Garo."

The Turin Exhibition

MISS I. ROBINSON

As I have seen no report in PHOTO-ERA of the photographs at The Turin Exposition, perhaps an account of what I found, on the occasion of a very short visit, may be of interest.

The exhibits were scattered; the most extensive collection being principally composed of Italian work, and centered in a gallery of one of the largest buildings. The entries here number nearly twelve hundred and the proportion of really excellent work seemed astonishingly small. Most of the prints are portraits, and in this branch of the art Italians do not excel. It needed only the comparison with Duehrkoop, who has fifteen prints here, many of them studies of men, to realize the superiority of the German school. Seven prints in gum-bichromate by the Baroness Viola Riederer Von Paar also attracted my attention. Several of them are of a vivid, almost blue-black tone which, combined with the softening effect of the process, is original and interesting. A barefooted peasant child with a shock of light hair, leaning against a broken fence with the cement wall of a house for background and a huge flat basket containing black and white rabbits beside her; and a man with two dogs standing in a road edged with poplars, are two which especially please the eye. Amongst the Italians whose work is worthy of note is Prof. Leopoldo Olivieri, who has a number of small prints, landscapes, etc. Ignio Torre has eighteen studies in some color-process, landscapes and figures. The only Autochromes were by Cav. Maggior Luigi Pellerano. He has a large collection representing almost every class of subject, including nineteen micro-Autochromes. Most of the colors appeared a trifle faded from several months' exposure to light, but they were excellent, especially the reproductions of paintings and still-life. An attractive collection of negatives and reproductions of works of art, by Anderson, advertised the dryplates of Cav. Michele Cappelli of Milan. An interesting series of radiographs, Autochromes, and transparent positives by various doctors and associations illustrate phases of disease, surgery and criminology. Particularly good were Prof. Marro's transparencies on the subject of idiocy and insanity.

Both the German and the English pavilions contain photographic exhibitions; and too much cannot be said of the excellence of the former collection. Portraits predominate, as do also warm blacks and sepia tones, and these, mounted upon Japanese papers of gray and cream and finished with passepartout of the same tone, were as restful to the eye as could well be imagined. Few of the names were known to me, but every group bears the sure touch of the artist and technician.

Elizabeth Hecker, of Munich, had some charming studies of women. One, in particular: a dark-haired young girl with a pearl headdress and a beautiful profile against a light background. Hugo Erfurth, Dresden, had large, decorative, strong studies of men's heads, rather suggesting charcoal drawings. Theodor Rnf, of Freiburg, showed large heads and very artistic half-length studies of women. Several manufacturers have tastefully arranged booths. In the section devoted to Satrap productions are several prints by Duehrkoop which have appeared in PHOTO-ERA.

The English exhibit is principally devoted to the wares of certain manufacturers: notably the Platino-

type Co., who demonstrate the use of their papers and storage-tubes, and exhibit in this connection some fine reproductions of paintings, etc., by Hollyer of London. The Autotype Co., Burroughs Wellcome & Co., the Ensign people, and Thornton-Pickard have apparatus, and there are several groups of portraits by local professionals.

American photographers evidently did not consider the Exposition of sufficient importance to send their work, for with the exception of a series of photogravures from Indian-studies by E. S. Curtis, I found only the names of Walter Zimmerman of Philadelphia and H. Oliver Bodine of Rochester.

In a general summary of the Exhibition two points may be mentioned: first, the marked superiority of the German workers over all others; and secondly, the absence of extremes in sharpness and softness. The general striving of all exhibitors seems to be for a sane and rational method of artistic expression rather than for bizarre effects and imitations of other processes.

Lens Causes Fire

A LENS left on a table in the drawing-room was the cause of a fire yesterday which destroyed the residence of M. Desmont, a lawyer's clerk of Orespières, Seine-et-Oise. The lens was near a window and focused the sun's rays on cloth upholstery of a chair, finally setting it on fire. The damage is estimated at £1000. — *London Daily Express*.

A Word of Warning

WE have recently had called to our attention an abuse of the public confidence which makes it advisable for us to put our readers on their guard. A photo-finisher issued a price-list with the headings "Printing" and "Platinum Printing" and furnished, at the price of platinum, prints on papers other than genuine platinum-papers. Those who have their work done for them should inform themselves of the exact nature of real platinum-prints by consulting a reliable dealer and refuse to pay for "platinum" unless the prints are made on such papers as Willis and Clements, American, Angelo, Etching Black, Etching Sepia, Harcourt or Wallace.

A Magnificent Panoramic Picture

IN our account of the Bridgeport Convention we referred briefly to the group-photograph made by Henry J. Seeley of Bridgeport, a print of which now lies before us. As a splendid example of work made under adverse conditions this group is probably unrivaled. The print is 12 inches wide by 5 feet long. The data are: Cloudy day with high wind; Cirkut camera; Regno lens of 18-inch focus used at $F/22$; $1/3$ second; the group occupied a semicircle and the camera was placed 30 feet from the center of the arc. We regret that it is impracticable to reproduce this extremely fine picture, owing to its great length, for we have seldom seen anything to equal it. We therefore advise those who were present at Bridgeport to communicate with Mr. Seeley at 922 Main St., and become the happy possessors of a print for framing.

Lectures at the London Salon

A SPECIAL FEATURE in connection with the Salon in London this fall was the series of talks given on Friday and Tuesday evenings at eight, the gallery being open at seven for the benefit of early-comers. The course numbered nine lectures, among them being: "The Search for Beauty," Anthony Guest; "Pictorial Work in Great Cities," A. H. Blake, M.A.; "A Tour Round an Old Garden," Alexander Keighley, and "Hints to Would-be Picture-Makers," H. Snowden Ward. Several of them were illustrated with lantern-slides.

WITH THE TRADE

New Wollensak Goods at St. Paul

WE learn that the Wollensak Optical Company brought out its new goods in full force at the show of the manufacturers in connection with the Convention of the P. A. of A. Perhaps the most interesting novelty is the diffusion-device supplied with the larger sizes of the Series II Velostigmat, F/4.5. This adjustment allows the portrait-photographer to introduce any required amount of softness evenly throughout the plate without actual fuzziness, ghosts, double-image or "run-around." In the line of shutters, particularly in the models capable of working at high speeds, great improvements have been made. There is also a fine assortment of photographs of noted people taken with Wollensak lenses. The Wollensak Company was represented at the Convention by Mr. J. G. Magin, Assistant Secretary of the company, Mr. Louis W. Weil, Traveling Representative, and H. Oliver Bodine, Manager of the new Department for Promotion of Trade recently founded by the company—an original, distinctive move in the endeavor to find new ways to create business. This department is for the exclusive use of dealers who handle Wollensak products.

A Paste that Will Last

A SATISFIED user of Day's White Paste contributes the following suggestion: "Like the wise little girl with her precious bonbons, I aim to make a jar of Day's Paste last as long as possible. So, instead of removing the paraffine wafer which protects the paste against decomposition or drying up, I cut away a piece about the size of a nickel, near the edge. This place I enlarge as the paste underneath is consumed. I keep the little water-well (which is also the place for the brush) filled with clean water. The top should be kept screwed on when the jar is not in use."

"What Lenses to Buy"

PHOTOGRAPHERS who are interested in improving their lens-equipment should correspond with Messrs. Bausch & Lomb Optical Company and secure a copy of "What Lens Shall I Buy?" This booklet is along quite unusual lines and abounds in useful suggestions. Address them at Rochester, New York, and mention PHOTO-ERA.

Another Burroughs Wellcome Booklet

"WAYS AND MEANS IN PHOTOGRAPHY" is the title of the latest of the interesting booklets for the photographer issued by the makers of "Tabloid" products. It deals with exposure, development, color-staining of prints, color-photography, intensification and reduction, and telephotography. It is an excellent introductory handbook for workers not already familiar with "Tabloid" photography and we advise all such to send at once for a copy, mentioning PHOTO-ERA, to Burroughs Wellcome and Company, 35-39 W. 33d St., New York.

The Imported Zeiss Lenses

E. B. MEYROWITZ, 104 E. 23d St., New York City, reminds us that he has a compact descriptive price-list of the famous Carl Zeiss lenses, a copy of which will gladly be sent to our readers on request. Those who prefer Jena workmanship and wish the guaranty of the Carl Zeiss name should correspond with Mr. Meyrowitz without delay.

Burke & James's New Catalog, No. 12

A VERITABLE treasure-house of information is the latest Burke & James catalog, which lies before us. It is a substantial book of 320 pages, 6 x 9 in size, and handsomely bound in hazel-brown cover-paper with an attractive cover-design. As a reference-book of materials produced by independent manufacturers this catalog is unequalled, for it contains full details of goods which are not usually to be found in the stocks of any but the very largest firms; hence it is invaluable to the worker situated away from the great cities. Since the No. 11 catalog was issued, Burke and James, Inc., has moved to a large new building particularly erected for the firm at 240-258 East Ontario St., Chicago, where all its seven manufacturing divisions are housed under one roof. A New York office and sample-room is also maintained at 225 Fifth Avenue.

Among the new goods listed we note the following: the Ingento Reflecting-Camera, with revolving back and reversible hood in 3 1/4 x 4 1/4, postcard, and 4 x 5; Bell's Straight-Working Panorama Camera; the Ernemann Detective Camera; Expo Police Camera; Ingento View-Camera No. 3, with turntable in the bed; the Primera Plate-Magazine; several styles of metal tripods; Ingento Special Color-Filters; Ingento Trimming-Boards; Ingento Style D Developing-Tank for developing, fixing and washing 12 plates—all in daylight if the Changing-Bag is used; Ingento Auto-Taik Kits and Adjustable Plate-Rack; and many other excellent and practical sundries. The latest introduction is the line of developers in tablet form, as advertised in our September issue.

A copy of this catalog will be sent to our readers for a postal-card request.

The Euryplan Lens

RALPH HARRIS AND Co., Boston and New York, has now had the agency for the Euryplan lens, which is made in Goerlitz, Germany, for over a year. During this time the firm has had remarkable success with this fine product of the lens-maker's art, having in many cases displaced other well-known makes formerly used by press- and other speed-photographers. The Series VA, F/4.5 lens is the most popular, particularly as the possessor of a long-focus reflecting-camera can use the back combination only and thus obtain pictures when the one-lens man is too far away to get an image of printable size. Some remarkable examples of this use have been shown to us by Richard Sears, of "The American." In many instances, too, purchasers of the Euryplan have bought a second or even a third lens of the same make, but of different foci.

By the way, the new price-list recently issued by this enterprising firm should be in every worker's darkroom. It gives in convenient form the prices on all standard photographic goods handled by them. We note with approval that they have followed the lead of PHOTO-ERA and spell dryplate as one word, also use hyphens wherever their omission would be ambiguous.

The Schering Developers

WE have had the pleasure to test Duratol and Satrapol. The advertising-statements of the makers are remarkable for moderation, hence the enthusiastic worker runs no risk of disappointment.

Duratol is a new salt, being chemically benzylparamidophenol and closely allied to paramidophenol, which

is usually sold in concentrated solutions requiring only dilution with water. It comes in the form of a faintly yellowish amorphous powder and is intended for use with hydroquinone, no formula for the single agent being at present available. It is soluble in hot water, and after it has dissolved the sulphite and carbonate, previously well mixed, are added, the hydroquinone being dissolved last. Any variation from the formula results in a precipitation of a white, flocculent addition-product of the sodas, but this can be filtered out without trouble. The solution is perfectly clear and colorless, remarkably stable and showing little tendency to work slower after repeated use. In one batch we developed plates of four different makes, including positive transparencies and several kinds of gaslight-papers. The image is bluish-black and fixes out but little, though we had no difficulty in getting plenty of snap and vigor. A separate formula for Professional Cyko and Artura is published, its particular advantage being that it gives, without bromide, beautiful blue-black tones and with bromide the warmer tones. The used developer keeps better than metol-hydroquinone in a partly-filled but corked bottle. To sum up, we should say that Duratol is an excellent all-around developer which should please those who cannot use metol on account of poisoning.

Satrapol is the Schering name for metol. Our tests show that it can be substituted for other brands in any formula with good results. There is, besides, an advantage in price as compared with some makes, 42 cents an ounce against 58 cents, according to one dealer's list.

Schering and Glatz, besides being the agents for a high-class line of photographic specialties, are also American distributors for the well- and favorably-known medicated soaps made by the J. D. Stiefel Medicinal Soapworks at Offenbach-am-Main, Germany. Samples of boracic acid soap were given out at the Saint Paul Convention by S. W. Nourse, the genial and popular representative of the firm, who also informs us that he will send on request cakes of pumice-stone soap, which is particularly adapted to remove developer-stains from the fingers. These samples are in addition to the liberal specimens of the Schering developers—Duratol, Satrapol, Glycin, Nerol and Citol.

The Library of Amateur Photography

THE AMERICAN PHOTOGRAPHIC TEXT-BOOK COMPANY, publishers of the well-known 10-volume Self-Instructing Library of Photography, has just placed on the market a new 4-volume set written expressly for amateurs. The first volume deals with elementary photography and covers such topics as the camera and its manipulation, developing by all methods, printing, enlarging and hand-camera work. Volume II treats in full of negative-making, printing, copying and enlarging, and retouching; Volume III, of general exterior photography and compositions; Volume IV, of at-home portraiture, flashlight-, commercial- and press-photography. A novel feature of the work is the system of reporting an actual demonstration, including the entire conversation between the instructor and the student. Our readers are referred to the advertisement of the library in this issue.

A Beautiful Catalog

EVERY camera-user on the Pacific Coast should send to Hirsch & Kaiser, dealers in photographic supplies, 218 Post St., San Francisco, Cal., for a copy of this firm's recent catalog. It is one of the most complete, beautifully-illustrated and printed catalogs ever issued by a photographic firm. The arrangement of the photographic specialties is admirable, and an alphabetical index in the rear of the book enables one quickly to

find any photographic article, accessory or publication contained in this book. Hirsch & Kaiser deserve to be highly complimented for issuing such a splendid catalog.

The New Defender Vulcan Film

At last the Defender Vulcan Film is on the market. From specimens submitted to us we can confidently state that the Defender Company has a very high-class product. The celluloid is of splendid quality, heavy, smooth and free from defects; the emulsion is fine-grained, evenly-coated and orthochromatic, rendering detail and gradation in a perfect manner. The film is, of course, non-curling. The speed is Class I of our tables. Ample density is easily obtained; in fact, some of the sample negatives would have been better if not developed quite so far—but this was the fault of the photo-finisher, and the prints on Triple A Velours brought out the gradation in a most satisfactory manner.

Our own trials confirm the opinion founded on examination of the results shown us by Mr. R. L. Ennis, the popular manager of the Boston office.

Mitchell's Hard-an-Fix

We have had the pleasure of using the acid chrome-alum fixing-bath made by Charles L. Mitchell, M.D., and advertised in recent issues of PHOTO-ERA. We found it quite efficient and reliable for plates, and, what is more remarkable, for developing-papers. This experience is rather at odds with some trials we have made with chrome-alum formulas, as Hard-an-Fix imparted no greenish coloration to the paper, whereas the other baths stained and degraded the whites. We can confidently recommend this article, as well as the Mitchell developers, to readers who prefer not to mix their own solutions, for only the purest chemicals and well-tried formulas are used by Dr. Mitchell.

The Graflex-Steinheil Combination

HERBERT AND HUESGEN COMPANY, 311 Madison Avenue, New York City, sends us an attractive booklet bearing the title given above. It is devoted to an extremely clear exposition of the advantages of the Graflex, particularly when fitted with one of the famous Steinheil lenses. The Unofocal, F/4.5, in a special mount, is the one selected. Optically, this is one of the most interesting lenses known, as it consists of four separated glasses having the same curvatures and the same refractive indices for each combination, the corrections being obtained by adjusting the separation. Copies of the booklet are free to our readers on application.

Ingento Tablets

UNDER the trademark "Ingento," Burke & James, Inc. has lately placed on the market a complete line of photographic chemicals in tablet form. The following have been submitted to us for tests: Ingento M-Q, Developing-Tablets, Ingento Reducing-Tablets, Ingento Intensine Tablets and Ingento Restraining-Tablets. Our first trial was with the reducer, which consists of tablets of potassium ferricyanide and of hypo, the advantage of tablets being here particularly marked, as solutions will not keep. Solution was easily and quickly accomplished by dropping the tablets into water in a graduate, crushing them with a glass rod and stirring. Intensine is a single solution intensifier put up in one tablet, which seems to contain mercury iodide. The directions are to dissolve one tablet to each ounce of water. The solution rapidly and evenly built up the two specially-prepared underexposures which we had made for testing-purposes, timing the plates so that only faint detail could be traced in the shadows. Treatment for five minutes in diluted used M-Q, blackened the

intensification, which proved ample to yield good prints on contrasty gaslight-paper. The M-Q. Developer is intended to be dissolved in the proportion of one pair of tablets to 2 oz. for paper, to 3 oz. for plates, or to 8 oz. for tank-work. We made a solution of one pair to 4 oz., as we prefer a weaker solution than the normal for most work. This strength acted admirably for varying exposures on several makes of plates.

The circular enclosed with each packet of the Ingento Tablets gives the Watkins factors and full direction for factorial development, hence these goods are to be recommended, as they render it possible for even the novice to secure good results from the start by following the system. With a Watkins Bee Meter as a guide to correct exposure and the factorial system to ensure proper development, success is assured.

An Appreciated Novelty

The latest departure from conventional precedents made by the Wollensak Optical Co. is one which will be greatly appreciated by all purchasers of Wollensak lenses or shutters. With each one shipped there is included an envelope containing screws for attaching the flange to the camera front-board. This is but a small matter, yet it adds greatly to the satisfaction of the purchaser.

A. E. Maris

A. E. MARIS, for twelve years manager of the Philadelphia branch of the Defender Photo Supply Company, has severed his connection with the company in order to enter the retail photographic field. Those who have had business dealings with Mr. Maris trust and believe that he will meet with every possible success in the new venture.

He is succeeded in the management of the Defender Company's Philadelphia office by Samuel J. Sloan, who has been traveling representative in the outlying territory for the past year.

Punctuality in Business

DID the photographer, in trying to keep an appointment for a home-portrait, ever miss the train by a few minutes? His watch was slow, was it? Then he should provide himself with an accurate timekeeper. Such a one is the Hamilton watch, the finest product of the American watch-industry at the present time. This is the honest and unbiased opinion of experts throughout this country to-day. But do not delay in getting one of these reliable time-keepers, for the factory, at Lancaster, Pa., is working night and day trying to keep up with orders. See the company's advertisement in this issue. Like every product advertised in PHOTO-ERA, the Hamilton watch is endorsed by the publisher.

An International Competition from Which Americans Are Excluded

THE European photographic press has given considerable publicity to a prize-competition conducted by a prominent continental manufacturer of photographic papers. The chief condition of this contest is that all prints submitted must be made on any of the several papers manufactured by this firm, which conspicuously states in its booklet of particulars that "the competition is open to all photographers of every country." In spite of the international character of this contest, however, American photographers are not allowed to take part! They are prevented from importing any of the company's paper, their orders, even when accompanied with cash, being politely but firmly declined, the reason for this action being that "for particular reasons we are unfortunately not in a position to consider the supply of our goods to the American market."

Some time, in the not far distant future, this particular firm may wish to seek a market in the United States for its papers, and it is sincerely hoped that its present attitude toward American photographers will be remembered.

Marriage of Miss Stanley

CARDS are out announcing the marriage of Miss Katherine B. Stanley, the eminent photographer of children, of Springfield, to Mr. John Andrew Zimmerman of Lebanon Springs, N. Y.

Artex Paper

SOME time ago we received samples of three grades of the new Artex papers, "made in Columbus," and gave them very careful trials. Our own favorite developer, Edinol-hydro, Kunz, worked very well and gave a fine black tone with more tendency to blue than is given by the makers' published metol-hydroquinone. The latter developer, however, will suit those who like a warm black, particularly on Grade E, which is a double-weight buff stock. We liked the paper so well that after a few trials to get the exposure we picked out several of our best negatives and printed them on this particular stock, subsequently framing them for home-use. On portraits, we got about the same detail and gradation as with platinum-prints from the same negatives, and believe that with a carefully-adjusted amidol one could get a blue-black which would be highly satisfying. Several of our subscribers who wrote for samples have expressed to us in enthusiastic terms their appreciation of the excellent quality of this paper—"the best that ever came out of Columbus," as one of them expressed it. Advanced amateurs who have become dissatisfied with the harshness of some of the papers intended for general use will find in Artex a medium capable of rendering full detail in a brilliant manner but without chalkiness.

PHOTOGRAPHIC EXHIBITIONS

Information for publication under this heading is solicited

<i>Society or Title</i>	<i>Date</i>	<i>Entries Close</i>	<i>Particulars of</i>
Eighth American Photographic Salon	1911-12	Oct. 1, 1911	C. C. Taylor, Secy. 3223 Cambridge Av., Toledo, O.
Belgian Photographic Association Brussels	Nov., 1911	Oct. 31, 1911	M. Robert, Asst. Secy. Palace du Midi Brussels, Belgium

Magazine-Clubs for 1911-12

Class No.

27	Ainslee's Magazine
17	American Boy
50	American Homes and Gardens (new)
23	American Magazine
45	Automobile (weekly)
17	Boston Cooking-School Magazine
80	Century Magazine
20	Cosmopolitan
70	Country Life in America
53	Craftsman
35	Current Literature
21	Delineator
12	Designer
23	Etude (for music-lovers)
23	Everybody's
23	Field and Stream
47	Forest and Stream
23	Garden Magazine
20	Good Housekeeping
20	Harper's Bazaar
70	Harper's Magazine
70	Harper's Weekly
12	Home Needlework
50	House and Garden
40	House Beautiful
35	Independent
95	International Studio
42	Journal of Education
70	Keramic Studio
15	Kindergarten Review
8	Ladies' World
80	Leslie's Weekly
90	Life
35	Lippincott's
60	Literary Digest
23	McClure's Magazine
23	Metropolitan
12	Modern Priscilla
60	Motor
47	Motor Age

Class No.

40	Motor Boat
60	Motor Boating
90	Musical Courier
32	Musical Leader
23	Musician
17	National Sportsman
12	New Ideal Woman's Magazine
70	North American Review
50	Outing
60	Outlook
25	Overland Monthly
23	Pacific Monthly
23	Pearson's
24	PHOTO-ERA
17	Pictorial Review
23	Pictorial Review (2 years)
27	Pictorial Review with Ladies' World and Modern Priscilla
40	Recreation
23	Red Book Magazine
35	Review of Reviews
40	Saint Nicholas (new)
25	School Arts Book (10 numbers)
50	Scientific American (new)
60	Scribner's
23	Short Stories
45	Smart Set
30	Strand
50	Suburban Life
17	Success Magazine
22	Sunset Magazine
40	System
19	Table-Talk
23	Technical World
35	Travel
70	Vogue
23	Woman's Home Companion
35	World To-day
37	World's Work
23	Yachting

The following magazines are sold only at the full subscription-price and are never clubbed :

Ladies' Home Journal.....	\$1.50	Saturday Evening Post	\$1.50
Munsey's	1.00	Youth's Companion (until Jan. 1, 1912) ..	1.75
Popular Mechanics	1.50	Youth's Companion (after Jan. 1, 1912) ..	2.00

These rates hold good until October 1, 1912

HOW TO MAKE UP CLUBS

To obtain the club-price of any combination of periodicals from the list given above, find the class-number of each of the magazines in the left-hand column, add them together and multiply the sum by five cents. The result is the club-price in the United States. Canadian postage is extra, and must be added to the price of each magazine. We shall be very glad to furnish quotations of either Canadian or foreign postage, and to fill orders for any magazines, whether listed here or not.

Send all orders, with remittance in Post-Office or Express Money-Order, direct to

PHOTO-ERA, Wilfred A. French, Publisher, 383 Boylston Street, Boston, U. S. A.

PHOTO-ERA the Blue-Book of Photographic Advertising

PHOTO-ERA

The American Journal of Photography

Vol. XXVII

DECEMBER, 1911

No. 6

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WILFRED A. FRENCH, Ph.D., Editor

Associate Editors, MALCOLM DEAN MILLER, A.B., M.D., ELIZABETH FLINT WADE

Contributions relating to photography in any and all of its branches are solicited and will receive our most careful consideration. While not accepting responsibility for unrequested manuscripts, we will endeavor to return them if not available, provided return-postage is enclosed.

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MILDRED
RUDOLPH FICKEMEYER, JR.



PHOTO-ERA

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A Few Remarks on Home-Portraiture with Artificial Light

NATHAN T. BEERS, M. D.

ALL of us, perhaps, sooner or later, arrive at the determination to attempt portraiture. I believe it is the most interesting branch of the art and the most difficult. Possibly these are the reasons why we all aspire to it. It is not my purpose, nor yet within my power, to give instruction in portraiture; but what I hope to do is to encourage others in the attempt by relating my own experiences and showing my rather crude results. In some of my pictures the errors are very glaring: in fact, I can even appreciate them myself. Nevertheless, I am willing that they be published, if only to serve as examples of what to guard against.

Some months ago, it became necessary for me to obtain a series of very exact and uniform records of certain skin-diseases. For several years I have been making pictures of medical subjects of all sorts at my office and in the hospitals, and in all of this work I have relied solely upon daylight as my illuminant. At times, I have been able to secure records of some real scientific value, but there has always been an annoying uncertainty about the work, due, on one hand, to the meager and almost impossible lighting-facilities in hospitals and clinics; and, on the other hand, to my lack of skill in handling such light as I was able to get. By way of explanation, I would say that a majority of the cases are photographed just before operation and the photographer must take things as he finds them and adapt himself and his camera to the patient, for he has little, if any, opportunity to pose the subject for the picture. Therefore, when this new line of work presented itself, I made up my mind to eliminate the one uncertain factor—daylight—and secure for myself some form of artificial light, constant in power and easily portable.

I am fortunate in having several friends who are professional portraitists of high rank, and to them I went for suggestions and advice. They all agreed upon flashlight as the best illuminant for my work, wherever it could be used without

breaking the hospital-rules. Where flashlight was prohibited, the Nernst lamp or the tungsten lamp was recommended.

I started at once to experiment with the various flashlamps and finally decided upon a small pocket apparatus which ignites the powder by means of a flint and steel, mechanically actuated. About a mustardspoonful of an instantaneous powder is poured into the pan, the spring wound and the trigger pulled (by hand, by bulb, or by antinous release) when ready. The flash is instantaneous and the sitter has no opportunity to wink or to move. To simplify the handling of this apparatus, I bored a quarter-inch hole in the end of the handle of the lamp, and this permits of its being attached to the sliding rod of a music-stand. The unshaded light gives too much contrast: it is best to use some sort of diffusing-screen. For this purpose the nicest thing seems to be a small cheesecloth-covered umbrella which may be attached to the music-stand by means of a double screw-clamp, as shown in the illustration. With an apparatus of this sort, the placing and firing of the lamp is much simplified. The firing may be accomplished simultaneously with the opening of the camera-shutter by connecting the tubes from the shutter and the lamp to the same bulb.

The Nernst lamp is rather expensive and much more complicated to handle than the tungsten lamp, and as I found that the latter could be purchased cheaply and readily in various sizes I bought one of two hundred candle-power and one of sixty for my experiments. The larger lamp was mounted on the standard of an ordinary head-rest so that it could be raised or lowered or moved about as desired. The smaller lamp was placed in the socket of a swinging cord in the center of the ceiling and was intended to be used to help out the shadow side of the face; but I soon found that it gave a double catch-light in the eyes and was much inferior to a reflecting-screen when the latter was properly placed.

Thus equipped, with two outfits—the flash-



light and the tungsten lamp — I am quite independent of daylight. My choice between the two lights lies with the flashlamp, particularly in medical work. It is quicker, insures critical definition, permits of some stopping down, does not demand the electric current, and, when used behind the diffusing umbrella, gives a most satisfactory light for portraits in the home. On the other hand, the tungsten lamp may be used where flashlight is not permissible — in the hospital-wards and the sick-room. It gives a very agreeable light for portraits and is surprisingly rapid.

The results of my first week's experiments with the tungsten lamp were, to say the least, disappointing; but I learned several points of value concerning its handling — principally that I was using the lamp too close to the sitter and that its actinic power was far greater than I

had at first believed. Later experiments taught me to use a white reflector behind the lamp and to place a diffusing screen a foot or two in front of it. I also found that the auxiliary lamp was not always required and that a reflector placed on the shadow side of the sitter would illuminate the shadows very well. This was welcome knowledge, because it assured me of better success in my hospital work, where it is not always possible to make use of more than one lamp. In making hospital-pictures one is limited in the use of accessories; backgrounds must be improvised from light- or dark-colored blankets draped over bed-screens, and the nurses must be called upon to steady the patient and to hold the lamp.

The question of exposure is not a difficult one. Having eliminated the only variable factor — daylight — we have but to consider the ordinary

A FLASHLIGHT PORTRAIT
DR. NATHAN T. BEERS



constant factors of lens-aperture and plate-speed. At night, with a dark background, side reflector and the screened lamp about six feet from the sitter, I usually give from fifteen to twenty seconds, according to the complexion of the sitter. The use of the smaller auxiliary lamp decreases the exposure slightly. These exposures are reckoned for a lens working at $F/5.6$, and a plate or film listed in Class No. 1, PHOTO-ERA Table of Plate-Speeds.

In conclusion, I would say that the tungsten lamp is a valuable piece of apparatus for any photographer. It lends itself in a dozen ways to his needs: it may be used in printing, copying, enlarging and lantern-slide-making and it is not expensive to maintain. It should be handled carefully when not in use, as the filament is extremely fragile, particularly when not burning.

There has just been placed on the market a

new type of lamp, which, while made for general lighting-purposes, is well adapted to our purpose.

It is known as the Star Flame lamp and is said to yield a candle-power of a trifle over 1400. It uses carbons and gives an intensely bright white light lasting about thirty hours, at the end of which time the carbons must be changed. It is small, light and portable; and, best of all, is cheap. It uses the direct current only and may be attached by means of an ordinary plug-and-cord to the regular socket. I had an opportunity to test one recently, and a dozen or more exposures under varying conditions and in comparison with the Aristo arc-lamp gave a ratio of three to one, the Aristo lamp being the faster. With the tungsten lamp of 250 watts the figures were reversed, the tungsten being three times slower. This new lamp is said to cost under five cents an hour to maintain. It generates



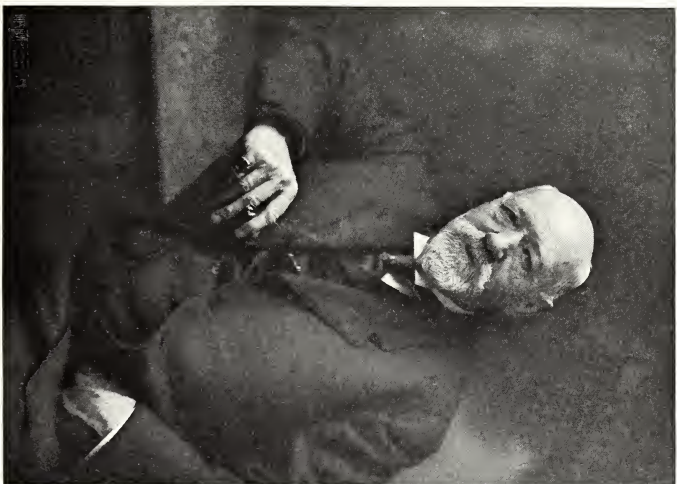
but little heat, requires no special wiring, and may be carried about in one hand. I am told that the price will be not over twenty dollars.

I desire here to express my thanks to my two professional friends in photography, Frederick A. Walter and S. H. Lifshy, who have given freely of their knowledge and patience in their effort to assist me. The portrait of Dr. S. was made under Mr. Lifshy's skylight during an afternoon's instruction in lighting and is a fine example of this expert's work.

The Reverend Dr. G's portrait was made on a dull day with the tungsten lamp and a little daylight. Exposure, 15 seconds, $F/5.6$. Mrs. L's picture was made with the tungsten lamp alone, 18 seconds. The family group was made with the flashlamp. The background is too close to the group and more flash-powder would have given a better result.

Photographic Tone-Rendering

As far as the quality of tone-rendering is concerned, photography is an exceedingly plastic medium; for within certain limitations, and without interfering with the purity of the tone-work, the gradations may be placed almost exactly where the photographer wants them. The scale of gradations may be condensed into a very few tones, or it may be expanded to its full limit; the delicacy of the higher tones may be brought out whilst the shadows are simplified; the depth and richness of the low tones may be accented, whilst the high tones are rendered in a few tints of gray; the picture may be printed in either a high or a low key. All this may be effected simply by exposure, development, and printing, without interfering with the purity of the medium. — *A. J. Anderson.*



DR. SHERWELL

SAMUEL F. LINSLEY



MRS. L.

DR. NATHAN T. BEERS

The Need of Legal Restrictions on the Publication of Photographs

HENRY LEFFMANN

IT is not three-quarters of a century since Niépce, Daguerre and Henry Fox Talbot developed practical methods for picture-making by the action of light. Since their time, an enormous advance has been made in both the mechanical and the artistic phases of the art. Its scientific basis has been carefully studied and its technic has been made simple and certain. The most notable advances are the discovery of the rapid emulsions and the methods for direct color-work.

In its earlier history, photography could not expect recognition as an art. The earliest pictures were mere contrasts in black and white, though the daguerreotype was pretty and in expert hands yielded a good likeness. The fact that silver nitrate blackens when exposed to light in association with organic matter was known to Glauber more than two hundred and fifty years ago, but real picture-making dates, as above noted, from work done shortly before the close of the first half of the nineteenth century.

It could not happen otherwise than that a method of this type should be misapplied as well as beneficially applied. Its use for forgery and counterfeiting is almost cotemporaneous with its development, but this paper is not concerned with those phases of photography.

It has appeared to me that the time is now at hand to appeal for definite restrictions on the making and publishing of some classes of photographs. As regards some types, but little difference of opinion among respectable people will be found; in fact, laws are already on our statute-books against indecent and obscene representations, no matter how produced. Photography, however, often violates the spirit of these laws by a specious claim that the work is artistic and, therefore, may escape condemnation. Undoubtedly the work of the artist stands upon a different basis from other representations. The nude human figure, for example, is the most difficult natural object for presentation either on canvas or in marble, and it is not unnatural that all true artists should strive to paint or carve it. It is true that even this opportunity is not infrequently misused. In any large art gallery one may see examples of work in which it is not artistic but purient motives that are utilized to secure attention. Several of the paintings and sculptures that have been recently subjects of public criticism are of this type. The

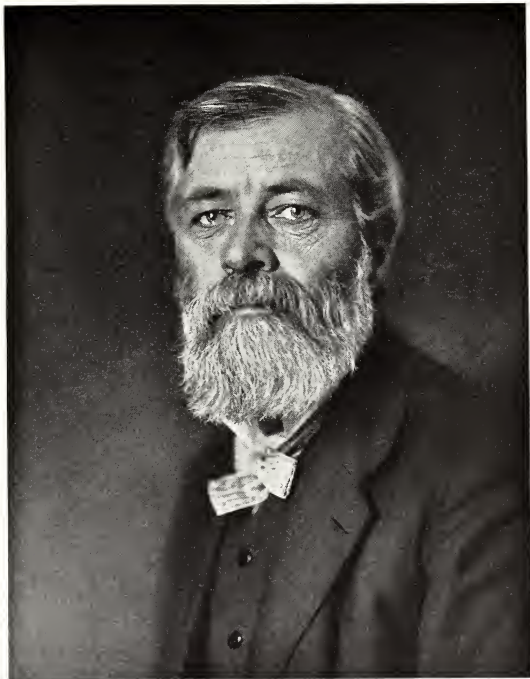
cry of "art for art's sake" has been much abused. Little in the present temper of the world of artists can be relied on to protect us from such abuses, but this should not deter us from attempting to prevent the spread of false taste and corrupting influences to other channels.

Whatever view may be taken of paintings or sculptures of the nude, there will be, I believe, no doubt in the minds of thinking people that a photograph belongs in a wholly different field, and cannot be considered art in that sense. True art is the origination of form, or combinations of forms. It is not limited to actual occurrences. Its productive field lies wholly within the realms of the imagination, although, like drama, poem or story, a basis of fact may be utilized. One of the most interesting pictures that I have ever seen was entitled "The Boyhood of Hamlet." It represented a court-fool carrying on his shoulder a pretty child. Such a scene appeals to us as a real one, and yet it is a fantasy about an imaginary person. The scene is merely suggested in the play.

In photography there is no true artistic selection or composition. The picture is produced by a manipulation of apparatus and chemicals, and the personal equation is reduced to a minimum. It may be said, and it cannot be denied, that, other things being equal, better photographs are produced by those having artistic ability or training than by those not having such, but this does not ennoble photography; it only shows its limitations and insufficiency. There is, however, a still more dangerous feature of photography in this relation. It is cheap, hence within the reach of almost anyone. This has led to the production of obscene postal-cards, with which the mails have of late years been so choked that the United States authorities have been obliged to consider the question of restriction. In former years, the vulgarities and obscenities of the great European capitals were exposed only to those Americans who actually visited them, or to a few intimate friends of the traveler who cared to bring along some specimens of photography. Now, a few centimes or pfenninge will enable anyone to forward some coarse picture to friends at home.

A special feature of the abuse of photography is the sale of the so-called "Artists' photographs." These are photographs of living nude figures ostensibly for use by artists, but really

REVEREND DR. G.
DR. NATHAN T. BEERS



not so used or usable by them. The true artist must draw from the real figure. No work is worthy classification as art-work if it is simply a copy of a photograph. Photography is used in a legitimate way in the copying of actual paintings and drawings. By these means the works of great artists are brought within the reach of many and the public taste is advanced. There is, however, a great difference between the photographic copy of Powers' "Greek Slave," Thorwaldsen's "Eve," and the photographs of living models, so commonly seen in picture-stores, clubs, and bachelor-apartments.

In most recent times a further abuse of photography has developed. The introduction of motion-pictures has much extended the opportunities of the corrupter. In the screen-demonstrations some limit is fixed. A mixed audience of appreciable size is recognized as not suitable

for the broadest representations, but in the motion-picture apparatus commonly called the mutoscope and operated in the halls seen along our principal thoroughfares and among the side-shows of our summer resorts, much coarseness is indicated. The profit of these machines must be considerable if we are to judge from the manner in which men who consider themselves well-behaved allow the exhibitions. Some years ago a food-show was conducted in this city under the auspices of some of the prominent grocers. At this a mutoscope exhibition of such a character was included that a formal protest against it was made by an organization having for its aim the promotion of social purity, and an effort was made to enlist the city authorities for its suppression, but the request was given on a half-hearted support, and the concession was too profitable to the managers of the show to act



against it. In the early days of these exhibitions they were "Pure Food Shows," but the managers soon abandoned the adjective.

At suburban parks, objectionable motion-pictures have been shown and a highly objectionable series of mutoscope views offered in the side-show.

The latter are all the worse because they can be seen for a cent, and are thus open to the youngest and the humblest.

Outside of the representation of indecent scenes by motion-pictures, I wish to enter protest against the representation of criminal acts, such as train-, bank- and highway-robberies, vendettas, fake battles and massacres. All these have a deteriorating influence upon the young and have no justification either as art or history.

In former years respectable firms did not openly advertise illegal and offensive pictures, but now film-companies in official catalogs, copies of which may be obtained from respectable dealers, not only list such pictures, but call special attention to them.

Such misuse of motion-pictures is the more regrettable because they are a most valuable addition to means of education and entertainment. Any audience, educated or uneducated, can be provided with an exhibition that will en-

tertain or amuse without passing the bounds of propriety or good taste, or prostituting pictures to such base uses. It is sad that reputable manufacturers should offer and reputable dealers sell the low-grade productions.

An entirely different phase of the abuse of photography is the unauthorized publication of portraits. The law upon this point is somewhat uncertain, but there should be some right of the individual to privacy. There is, of course, scientific value in the photographs of distinguished and even of notorious persons, and it would be a matter for regret if these were wholly suppressed, but human vanity can be trusted to give us an ample supply of permitted photographs of the learned, the rich or the artistically- or politically-prominent; those who do not desire to appear in counterfeit presentment should be protected.

I have sought to bring together here some thoughts that have been developed of late by seeing the great abuses to which the cheapening and simplification of photographic methods have led, and I believe that questions of restriction of the art will be before long a matter for serious consideration by those who have the moral and aesthetic well-being of the community at heart. — *Journal of the Photographic Society of Philadelphia.*

A Poet of Sunshine and Mist—A Recorder of Atmosphere: Maude Wilson

SIDNEY ALLAN

SOFT gray days along the coast, lone tracts of duneland basking in shimmering sunlight, scant vegetation straggling its way through the dry soil, mission-buildings with the play of light and shadow on the white walls, the surf among quaint rock-formations, the mist from the ocean rolling in among the hills, bare foregrounds with a few decorative weed-stalks, sunshine and mist, mist and moonlight — such is California, at least the California which Maude Wilson depicts.

Maude Wilson is a new name in the world of pictorialism. Her prints, hitherto, have escaped exploitation in the magazines. She is an alien to the Annual Salon, competitions and camera-club exhibitions; in fact, she has never exhibited. She has worked quietly for several years in a studio at Carmel-by-the-sea, doing professional portraiture for the transient tourists, and indulging in her leisure hours in view-photography. She endeavored to record the beauty of her native State, in the way she saw it, what it meant to her, and there vague atmospheric versions and misty scenes gained so much recognition, that the proceeds of a few years' work enabled her to make a study-trip to Europe. On her return she may settle in the East and devote herself entirely to pictorial photography. This is about all there is to say about her biographically. She has developed under the influence of Genthe, and is like him an adherent of the snapshot-and-enlargement school, but she went her way quite independently, and her work — however we may value it — shows strange subtleties of workmanship and a clean artistic aim.

Is it not strange that a talent like hers can grow up, unnoticed and unappreciated, right in our midst? Her indifference to ordinary photographic ways and honors may be the cause of it. Or is it the difficulty of reproducing and popularizing her poetic visions that reject all detail, and are as faint as "fleeing dreams"?

She is an extremist in elimination. She does not care for any subject-matter. She focuses upon the lyrical vein of things. A shiver of light in the eager morning air, a moon rising behind dew-drenched trees, a whitewashed wall where wavering lights and shadows come and go — impressions like these furnish the inspiration for her prints. And she succeeds to record these impressions, in such a manner that they

produce in the beholder very much the same emotion as the author received from the original. She invented a technique of her own to produce these effects. She underexposes, the image is vague from the start, and from these thin negatives she enlarges up to portfolio size. The result is generally an extremely light (or middle-tint) tonality, an annihilation of all detail, contour and modeling, a process of reducing to two or three tones in which form is expressed in blurred shapes and silhouettes. Her range of values is frequently limited to five per cent of what is possible in the medium. She frees her art-ideas from all the trammels of material flaws, but does not succeed in making her technique equally bold and free. Although her black and white palette possesses both tint and tone, it represents merely a limited phase of photographic expression.

Most of her *motifs* are uninteresting as far as grace of landscape is concerned. The lines are ineffective in themselves, there is no mastery of composition, no selection of a favorable view-point, no picturesqueness, even; merely an atmospheric mood, and with this mood of shimmering light-mist or spume, she clothes, like a magician, each scene of her selection with a touch of beauty. She sacrifices everything else, line, form, space-arrangement, spotting, chiaroscuro, relief, highlights, contrast, suggestion of color. It is all obliterated. There is rarely a trace of it. She avoids all stronger accents. In her seashore-delineations she does not give broad generous sunlight, a sudden glow of pleasure, but rather a mystical veil of radiance that hovers calmly over the sandhills. Her "Surf at Point Lobos" reduced the frolicsome seas to dark indistinct shapes and large sweeps of foam in which all wave- and rock-structures are lost. Pictorially her prints create no *illusion*, they are naught but haphazard fragments of nature that *suggest the feeling*, the inner law of beauty of the object shown. They are whimsical, like Whistler's lithographs; they have their shy suggestion, but naturally lack the seductive ease, the mental flavor which lend a special fascination to the painter's work. A bromide enlargement cannot compete in textural qualities with a crayon lithograph, and a few gray touches do not prove sufficient to enliven a large area of white.

Elimination in photography is one of the qualities which may reflect the range and limit



MIST FROM THE OCEAN

MAUDE WILSON

AN ALTAR-DRESSER —
SAN JUAN CAPISTRANO
MAUDE WILSON



of the craftsman's thought, but there is also a limit to this elimination and it is easier reached than in the other graphic arts. Our nocturne painters, Dabo, Wuerpel, Lucas, in their vague fashion of representing twilight and night — although they deal with juxtaposition of colors — never go as far as Maude Wilson. They still cling to a decided division of space. As soon as all line and suggestion of detail are lost, the planes lose their translucency, they become monotonous and not even the vibration of atmosphere (which is the saving grace in all of Maude Wilson's pictures) will prevent the texture from becoming flat, cold and motionless.

Even Maude Wilson is best in those pictures where she is least vague. Of course, there are differentiations. In one of her masterpieces, "Silence," there is actual palpitation, the tones melt into each other, while in her "Moonlight,"

a more popular rendition (and one which she does not herself fancy) we have the ordinary mellow sheen of a shining sea. No subtlety, no elusive changes, merely vividness of effect.

In "Silence" we feel the stillness of evening, the muffled pulsing vibration of light conquering darkness, and yet there is still a distinct suggestion of form, contrast, and the repetition of shapes in the branches which by their very parallelism of indistinctness produce the optical effect of tremor and wavering masses. I do not believe mood-representation can go any farther.

Maude Wilson, as we see her to-day, is not a versatile performer. She merely sings one song, but that one well. In her little way she has a new message to deliver, she has a style of her own — a rare thing to say! — a tempered technique and a convincing grace that will please amateurs and experts alike.

Practical Retouching for Amateurs

CLARA WEISMAN

RETOUCHING is an art. Two kinds of retouching are, however, found—the mechanical and the artistic. As in any artistic profession, the technical part must be considered and learned first; and even in this field the refinement of its technique may mean much.

The first object for consideration is the retouching-desk. Ground-glass or onion-skin tissue-paper should be used to give a beautiful subdued light. This also prevents anything foreign from interfering with the perfection of the negative. A good light is essential, north light being the best, because it is more subdued and even. A dense negative requires a stronger light than a thin negative. A light strong in visual rays causes the image to be looked *through* instead of *at*. This is particularly true of a thin negative—*all* perspective seems to be lost. By changing the position of the reflector or placing the desk closer or farther from the light, any effect of light that is desirable and right may be secured; and through its rightness the first step in the refinement from its technical standpoint is produced.

Obtain a proof or print from the negative before retouching. Print dark enough so that the imperfections show in the highlights. Occasionally a proof can be made to ascertain the progress. The more proofs or prints are made and studied, the greater the progress. Print dark enough so that the retouching shows in the highlights.

Prepare the negative with a varnish or medium. This gives the negative a tooth so that the desired results may be obtained by the use of a pencil. The kind of pencil has much to do with the progress of the beginner. A supply of two or three grades is necessary. The Faber Graphite is excellent. It is more satisfactory for a beginner to use a hard pencil, such as the H H H H. The first difficulty to overcome is a heavy touch. After the delicacy of touch is acquired the H H H or the H H may be used. Sharpen the pencil by cutting away the wood sufficiently, letting the lead extend away from the wood about an inch. This long point gives to the touch an elasticity which aids greatly both in the lightness and freedom of touch. The lead should be tapering to a point, on the principle of a needle, though not so sharp and pointed.

To learn the art of retouching, it is much

easier to begin on medium-sized faces; the imperfections are more readily discerned and a freedom of touch is acquired quicker than in small faces.

Examine the negative very carefully and compare it with the print. It will be seen that everything is reversed—that which is light in the proof is dark or dense in the negative and that which is dark in the proof is light or transparent in the negative. The proof shows clearly what and where the imperfections, such as freckles, blemishes of the skin and imperfections in the modeling, lie.

Retouching is made up of little things, a little modeling here, blending there, softening a line, bringing out a muscle or a prominence here or a feature there. The image is in the negative, and with it its imperfections. Retouching perfects it while at the same time it keeps the likeness or aspect of the person, finishing the work of the posing, lighting or what-not of the imperfect negative.

The stroke may now be considered. There are several good systems or methods of retouching, viz., the curved stroke, (((((the slant line, / / / / the cross-hatch, # the dot or the stipple, and the hook V. The circular movement is used by some, lifting the pencil only occasionally, but this necessitates putting lead on the plate where it is not needed. The dot-system lacks breadth of workmanship. Some use any kind of stroke with success.

The first step in retouching is to remove the transparent spots, caused by freckles and the like, by a little accent-mark or touch, something like a dot. These blemishes print dark in the proof, and they are often exaggerated in size and clearness. Remove these blemishes firmly and freely with as few touches as possible in order to produce a looseness of effect. Avoid a filling-up process, the placing of a number of little strokes where one or two would suffice. Cut up the imperfections instead of trying to fill them up. Too light a stroke necessitates the use of too many strokes. Place the accent-marks or touches firmly enough to bring the transparent places up in tone to the surrounding color or tone of the negative where the imperfections lie. Get the minor imperfections out of the way, those that have nothing to do with the modeling. Take out all the transparencies which interfere with the regularity of the skin-texture, being careful not to be too precise in



trifles. Occasionally an individual is found who prefers that the few existing freckles in a child's face be not removed. In such a case the freckles should be so delicately handled that they will not be the first thing that is seen in the finished picture, which would be contrary to nature's effects, for the first thing, as a rule, that is seen and looked for is beauty of character, expression, features and the like, and not freckles. This principle may be applied to any imperfection.

It is preferable for a beginner to eliminate all the existing imperfections in the face first, in order to become acquainted with pencil and negative, in order that the eye may be led to see other imperfections which are not at first visible to him. To remove freckles, one must get closer to the work in order to produce an effect of greater accuracy and delicacy; that is, to avoid too heavy a touch for the required spot.

To remove larger imperfections, get farther away. By so doing one gets a view of the whole, and the larger imperfections are more readily seen. The larger imperfections deal more or come closer in touch with the modeling or form of the face, while freckles and little imperfections do not. The beginner cannot see the larger imperfections at close range, particularly the more delicate ones. Get far enough away so that the whole face may be seen with ease, that is, its details, its imperfections; thus the eye can more readily see the true form or shape of each imperfection, of each mark of character, line and form of feature. The tendency of beginners is to look too closely; and yet to go to the other extreme is to produce work with too heavy strokes. These larger imperfections are light places of all shapes and sizes and give a mottled effect to the skin.



SURF AT POINT LOBOS

MAUDE WILSON

They are little shadows, so to speak, or clouded effects caused by imperfections in the skin, such as color-spots, or by the lighting.

Make a proof before attempting to eliminate these imperfections. Make it dark enough to tell the whole story of success or failure with regard to the transparencies. If marks are too heavy the proof will show little light marks, if too light the freckles will still show, though not as strongly. The proof will also show whether the marks have gone beyond the imperfections.

Now study the proof and the negative in search for these larger imperfections. The beginner can see them more readily in the proof than in the negative. Find their corresponding places in the negative. To remove these, strokes are necessary, not merely touches. Whatever method of stroke is adopted, the principle is the same. Work slowly and studiously. Every stroke is either right or wrong, either adds to or takes from the value of the work. After the first stroke is made in an imperfection (if that stroke was made with the right weight of touch), the remaining part of

the imperfection will suggest the direction and weight of the next stroke and so on until the imperfection is removed. Work cautiously and delicately. In trying to get the right weight of stroke, do not put too much lead on the negative. Do it so lightly that no strokes can be seen; this rule is a good guide, for the work is more likely to give satisfaction than if done too heavily. If it is done too heavily, the negative will be loaded with lead and the proof will show light marks and scratches. The strokes in themselves should not be seen, only their effect. The weight of these strokes should be heavy enough or light enough to make the imperfection meet the color that surrounds the imperfection, whether it lie in a highlight, a halftone or a shadow, in a dense portion of the negative or in a transparent. The weight of stroke in each is quite different; each place suggests its own weight of touch, only to be mastered through experience. Work slowly; quick work is sure to produce failure. Anyone who can write can learn to retouch. It needs careful and patient study; and the greater the supply,



AMONG THE HILLS

MAUDE WILSON

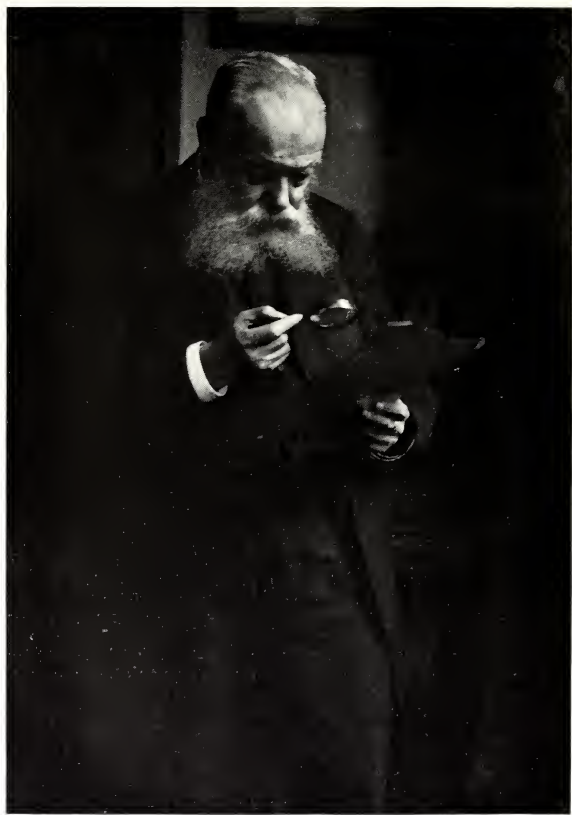
the greater the progress. To compromise is to fail or to retard progress most seriously.

Too heavy a stroke or a stroke made in a wrong place makes more work. The more loading on of lead, the less art, the less beauty, the less nature. The true beauty of flesh is flesh. The artist with paint and brush strives to produce on canvas the effect of flesh, which is at best very difficult to get. The photographer too often destroys by overwork that which the artist longs to produce. The beautiful skin-texture produced by judicious focusing and the like is sometimes sadly destroyed by overwork, by a misunderstanding of what is really artistic and good—that which is really refined and beautiful, that which the photograph is supposed to portray. The artist longs to represent flesh-texture, and the less work the retoucher puts on the plate, the more he is likely to produce that which is natural and true. No amount of pencil-work can produce the beauty of nature's skin-effect. This should be encouraging to a beginner, for the old-time way of putting on much work for the sake of a grain or stipple

requires needless effort. To attain the artistic, do as little work as possible, with only as much work as will become a part of what is already beautiful—with the workmanship hidden, as it were.

Too heavy a stroke is almost unavoidable at first; too light a stroke is the next error. A beginner is sure to do too much, but by the use of a series of proofs, comparing them with the original proof, he will soon learn how much of his work is unnecessary. He comes to do only that which is necessary and to do it where it is necessary.

A very helpful way and a less confusing way for a beginner to work after the freckles or the little transparent spots are removed, is to work at each feature by itself—the forehead, the eyes, the cheeks, the nose, the lips, the chin. Handle each as a whole, then sit back and examine the features or face as a whole to see if they are pulled together, to see if all the parts belong to each other, if there is a harmony, a unity of effect throughout. As the work proceeds, the strokes become longer, and thus the



KARL HEPP
WILHELM KÜBELER



natural skin-texture becomes perfected. The work blends in and becomes a part of the original flesh, instead of manufacturing it. No amount of lead can perfect that which is already perfect in the negative.

If one stroke accomplishes a purpose and two or three are used instead, this result can never be as artistic as it would have been had but one been used. Too many strokes produce a hardness; too many and too light produce a tightness, thus giving more of a plaster-cast effect. Too short a stroke necessitates a greater number of strokes, making the work look harder; the broader, freer, looser flesh-effect is destroyed, or rather is not produced. It is the pores in the skin which give it a soft appearance. The most difficult part of retouching is to get the work to appear as though it is a part of the *original* skin itself and not laid on top of the skin. Too many strokes or too heavy strokes force the work to be laid on top of the skin. Strokes in wrong places will also do this.

To study the modeling of the face, look for the highest point of light on each feature and follow the form in its gradations of shades in order to become acquainted with form and light and shade. Examine the face as a whole, pick out the highest point of light, its next highest and so on, then its halftones in the relation of one to the other and then the shadows, ending with the deepest shade. In this way, lights and their gradations will be felt. Study faces, look for forms; notice the tendency there is to roundness even in the most angular features. Poor lighting often gives an abrupt jump between the lights and the shades, particularly when the highest lights come in touch with the deepest shades, leaving out the delicate gradations which lend a harmony between the two extremes. This is so

often the case with the inexperienced! By a little blending, a little rounding, these faults can be remedied. Work from the lights into the shades to round the features as nature has them. Work lightly, make a proof and compare it with the first proof.

Character and expression are the most interesting things about the face. Leave all that is characteristic and beautiful in the face, that which expresses the individual. Every character-line is a mark of beauty. Lines are often accented, due principally to poor lighting, timing and developing. If they are exaggerated, soften them and shorten them if necessary to add beauty or to produce naturalness. The lines which are likely to be exaggerated are the lines of the forehead, those between the eyebrows, those under the eyes, those from the nose to the corner of the mouth and those which cause the lips to droop at the corners. Some lines may be removed without destroying character, such as laughing-wrinkles at the corners of the eyes, the perpendicular lines between the eyebrows and the lines of the forehead. Some lines may be shortened with advantage. Each line must be carefully considered as to its handling with reference to the age and individuality of the person. Do the work lengthwise of the line; do not cross the line with strokes, for these are sure to destroy its delicate modeling. He who handles the subject should retouch the negative; the result will be more satisfactory in most cases than if an outsider did the retouching, because the latter is not likely to feel what is desired, not knowing the subject. It is better to do too little work than to do too much, so the amateur need have no fear in attempting to retouch if he goes slowly and works carefully. Retouching can be rubbed off with turpentine and cotton.

The Hot Weather in England

ONLY a week ago I was verging on grumbling at having to stay indoors for an hour while the weather was so temptingly fine. The following day I was free to go where I liked, and on that day there was a record storm. Such is life.

The next off-day I had was one of the scorching variety we have been having lately, when only imitators of Lady Godiva have any chance to keep cool. After much spurring, I managed to get myself on the move with a rather heavy camera, and made a pilgrimage to a spot which was once a favorite haunt of mine, and which I had not visited for a year or two. The particular spot used to be my starting-point for a twelve-mile walk, mostly beside a river, and at

the very beginning was one of those old wooden bridges now growing so rare. I meant to have a serious wrestle with that bridge, with its reflection in the stream, and the big clouds in the blue sky above. I do not wish to use unseemly language, so I will just state that the bridge has been replaced by a huge brick viaduct. I say no more.

Passing sadly on, I found the river low in level and high in aroma. Its surface was blotched with cut weeds, in which dead fish floated in semicircular limpness. The tow-path was a flinty nightmare, the sun set fire to my imitation Harris tweeds, and when I ventured to open my reflex camera my tears and perspiration filled the hood and overflowed its

brim. I was supposed to be photographing for pleasure. Staggering and gasping, I stumbled across a tenth-rate subject at the end of the fifth mile, and by that time the sun had retired behind a storm-cloud, and my exposure-meter took three hours to register a quarter-tint. This made the exposure about two minutes, which is rather longer than I care to risk with a camera held in the hand. I daresay I could do it, but I did not stay to try, as there was a signboard visible on the horizon. I reached the horizon. In a large jug [English for "pitcher" — Ed.] place six lumps of sugar, over which pour the juice of three large lemons, and add three bottles of soda-water. Sit on the horizon, empty the jug at one pull, and give thanks. These are not exactly photographic instructions, but there is no photographic formula of equal value.

I finished the twelve miles, and but for other halts on horizons the twelve miles would have finished me. I also took four photographs, which work out at one-third of a photograph per mile. They are poor things. One of these

days I will write a book on the pleasures of photographic trips. It will be permeated with bitter sarcasm and bristling with lurid expletives. I shall include a very tasty [*sic*] chapter on the disappearance of wooden bridges; there will be hints on maintaining dialogues with bargees; and a valuable appendix of recipes for horizons. There will also be a series of illustrations from my own prints, showing in their true light the so-called beauties of rural England. I shall prove beyond dispute that the photographer who expects to find the picturesque in this land of brick viaducts is a blood-relation of the common ass. The book will do good in many ways. It will put an end to the photographic trade in this country; stop the sale of the present necessary remedies for blistered feet, sunstroke, the horrors, and the blind staggers; and reduce the population of the lunatic asylums. Too long has photography been a scourge to those who might otherwise almost approximate to rational human beings. I will publish the truth and put an end to it all. — "The Walrus," in *Photography*.

A Successful Interpretation

WILFRED A. FRENCH, PH.D.

IT is through such sympathetic painters as L'Hermitte, Bastien-Lepage, Le Breton and — above all — Millet that the character and picturesque charm of the Norman peasant has been revealed to the world. Yet, because the brush in the hands of an enthusiastic artist often tends towards undue idealism, the seeker after truth is inclined to be skeptical, and does not know how much to subtract from the product of an exuberant palette. Here comes the photographer, a person fully as sympathetic and fervent an interpreter as the painter, and provided with a medium nearly as pliable, expressive and convincing. To be sure, the gift to portray adequately human character and emotions by means of photography has not been accorded to every camerist. It is generally conceded that, however sincere his motive, the maker of the mere photographic record is not an artist, as his copy, lacking the impress of a sympathetic personality, seems prefatory, prosaic or even ludicrous. When the painter or the sculptor begins his task, he has behind him years of intelligent study and patient toil devoted to the acquisition of a technique — manual skill. His success as a genuine artist, however, involves more — a mind to grasp and a soul to interpret. So the photographer, burning with a desire to make a picture which appeals to the emotions, such as an expression of maternal love or communion with

Deity, must not only be *en rapport* with the subject, but must also experience no embarrassment regarding his means of expression. His style must be completely developed *before* he essays the task of interpretation. He must not permit technique to dominate his work. It should be discreetly subordinated and be made to appear spontaneous and fitting. When the virtuoso is entirely engrossed by his manual dexterity, the performance becomes a mere record of notes and is not in any sense a spiritual interpretation.

The picture of the Madonna reproduced on the opposite page is the product of an artist — in this case not a painter, but a photographer. He must have moved among these lowly, sincere French peasants. He has doubtless learned to understand and to love them. In writing about these photographs of French peasants, of which we have selected for reproduction one of the strongest in its sympathetic appeal, the author says: "Was there ever a Madonna painted with nimbus and blue robes more exquisitely spiritual? What passionate tenderness in the encompassing hand and the brooding curves of the beautiful mother body! Could any woman be trained to express such devotion and perfection of love through lessons in grace? This woman's body in absolute repose expresses the truth about her soul."



Courtesy of "The Craftsman"

A MODERN MADONNA
ANONYMOUS



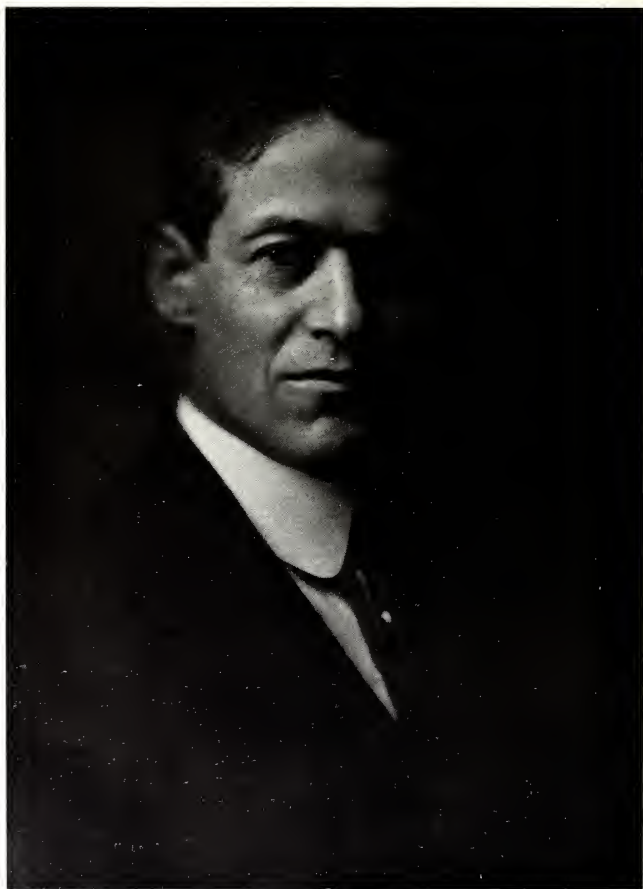


FIGURE ONE
ILLUSTRATING ARTICLE BY
WILLIAM J. EDMONDSON



Seeing Things Correctly — A Lesson on the Judging of Color-Values

WILLIAM J. EDMONDSON

THERE is no reason in the world why photographers should not take up many of the problems which confront them, from the same standpoint as would the painter. So many of the photographic profession look upon painters as belonging to a class who have superior perception; they jog along modestly year after year, gleaming a little information here and there, through criticism, observation, or at the conventions, and seem satisfied. They forget that they have the same faculties capable of being cultivated, and would not even think it possible for them to acquire artistic knowledge equal to a painter's.

Now let me say to you, Mr. Photographer, that you are altogether too modest and easy-going. You don't realize what a cinch you have. Your problem is an easy one compared to that of the painter, and I think I am not putting it too strongly when I say that you have an advantage over the painters and that you ought to be, as far as your work goes, equal to them.

That is to say, the study of art is a cultivation of the sense of sight open to anyone who wants to make the effort. The painter's observation or sight must necessarily be keener, for he has to search out the things that produce the picture and mix in pigment the various planes of light, shade and color-value, and acquire with years of hard practice the skill necessary to draw them on his canvas.

The point I want to make is that he must see or conceive the things correctly before he can paint correctly, and as his perception or sight improves so will his painting.

Whereas you photographers do not have to concern yourselves with anything nearly so difficult as the production of your subject by actually making it in its component parts.

You do not have to analyze each little plane and adjust it in value to its surrounding colors so that it appears as it does in nature.

You have only to know what you want to get as a grand total; only to arrange your motif, squeeze the bulb and the camera does all the hard work for you. You can make hundreds of pictures while the artist is painting one.

Think of the experience this gives you that the painter doesn't have and how you could follow up ideas that would naturally come to you in the course of that experience providing

you were looking very closely for them. This is your advantage, and so I say your problems are comparatively simple, and while the commercial element is a factor not to be overlooked, and the public taste not altogether inspiring, still I say that if you want to stand high in your profession you must know the artistic side of picture-making and should go far in it.

There is nothing that will start us on a series of studies and stimulate us in our work like a new idea, and I should like to give you here a critical examination of a portrait in a way that will perhaps be new to some readers or at least start them thinking from a different standpoint.

It is almost a universal practice among photographers to use screens in lighting a head, to reflect or stop light as the need may be.

I understand that a certain amount of reflected light might be necessary at times when the shadows would otherwise photograph black and opaque, but the use of the screens is very much overdone.

The idea seems to be that the modeling of the head is helped by screens, but directly the opposite is the case; it is harmed, and very much harmed.

To illustrate, look at the portrait plate No. 1, which shows a head lighted, or darkened (whichever you like) by means of screens. The shade from the screen is thrown over the side of the face to **THROW IT BACK** while the higher portions are left illuminated to **BRING THEM OUT**, all of which is emphatically accomplished.

But, study the result. The shade goes back so far and the light comes forward so far that you have two tones working against each other and not together, and instead of helping the modeling it destroys it, producing not better form but a change of color. It is crude, artificial, disagreeable, clumsy and inartistic. There is nothing subtle, interesting, or beautifying about this kind of darkening. In fact, after all the trouble with the screen machinery, you've made a mess of it absolutely, from an artistic standpoint.

To show plainly just what happens take plate No. 2. Here we have a simple round form without eyes, nose, mouth or cheek-bones. The light is allowed to fall on it naturally through an opening in the window, without being cut off by screens in certain places.



Figure Two



Figure Three

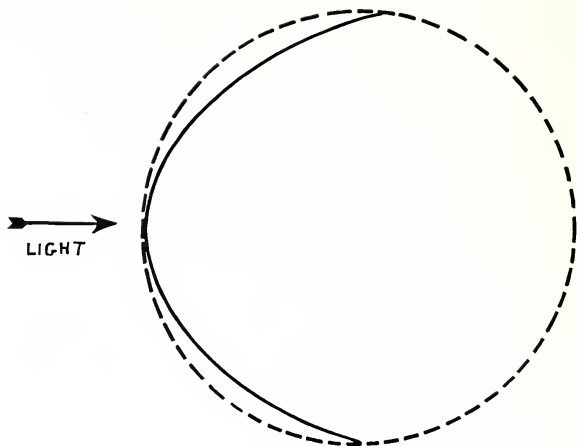


Figure Four





The transition of tints from the highlight as the form goes round is subtle and gradual and they hold together.

The form comes out solid and true. Now look at plate No. 3; the same vase, but screened the same as the head.

The effect is equally apparent here as in the screened head. Compare No. 2 and No. 3, and note the difference.

The shaded portion of No. 3 is exaggerated by an artificial shade which pushes it in too far. The transition from light to dark is too abrupt and sudden, not true and subtle as in No. 2, but so marked in difference that the tones do not hold together. In other words, a part of the picture is made in a light key and the other part in a low key; the two don't fit together and the tonal quality of the picture is destroyed. The actual appearance of the screened vase is shown in plate No. 4.

The dotted line represents the true section of the vase and the heavy line shows the shape of the modeling of vase as screened.

The light comes out on the correct plane and in true color or key, but the shadow produced by the screen exaggerates it as it does the

modeling on the shaded sides. It is so dark that the form is pushed in too soon on the sides and the full true modeling is lost. The effect in the head is exactly the same.

This phase of lighting holds good in all parts of a picture, whether it is the face, drapery or accessories and is one that could be studied with profit by the great majority of photographers.

Why should you not take up the subject of the relation between light, shadows, color-values, tonal quality, etc., just as a painter does? It enters into your work the same way, but not in the same degree as in the work of painter.

With no difficulties of drawing or painting to overcome, the problem which faces you photographers seems clear sailing and offer an alluring field, so I repeat that you ought to have as perfect an understanding of it as painters.

All has not been said in photography by any means and that little scale of color-tones from white to black is capable of many turns and adjustments. It can be worked with many changes and great variety and all that is needed is a few "brains," as Whistler said when someone asked him with what he mixed his colors.

— *The Association Annual, 1911.*

Artistic Interiors

E. H. WESTON

THE home-spirit is a great factor in any nation's advancement toward higher civilization. Since the rising generations must certainly become educated to the artistic by association in the home with tasteful and beautiful surroundings, it seems to me that the photographing of artistic interiors for publication or distribution in other ways is a most useful branch of the photographic art. It should also prove remunerative to one who really can show superior ability, hence commanding his own price.

The average attempt of the inexperienced results in a series of black and white blotches, most distracting to the eye. After mastering technique there comes a longer, harder struggle when those who have it in them begin to see that there is something beyond the mere perfect reproduction of what the lens throws on the ground-glass. They begin to see that simplicity is essential, as in any attempt to obtain an artistic result. They become careful to arrange the objects in the picture, so that the lines will balance; to mass light and shade harmoniously and to weed out unnecessary objects instead of trying to fill the picture with all the brie-à-brac possible. But perfect technical ability should be the foundation on which to build all artistic endeavor.

As the subject of this article is "Artistic Interiors," I shall assume that the reader has the necessary knowledge to make a perfect record-photograph of the view he wishes to take and to consider technique only as means to further some artistic end.

It is much easier to have your room lighted properly; to have your furniture arranged tastefully and to remove unsightly or obtrusive articles before making the exposure than to labor over a careless effort, reducing, intensifying, etching or resorting to other methods of after-manipulation. Care should be exercised in setting up the camera. The ground-glass should be plumb and the camera absolutely level.

In the view you are about to photograph, what is your most important object — the one that should stand out above all others? You have decided? Now look at your ground-glass. Have you placed the principal object right in the center, which is the weakest point in any composition? If so, then change it and avoid the necessity to trim the finished result. Try to arrange your furniture, rugs and other acces-

sories in lines that will lead the eye into the picture and up to the point of greatest interest.

Look at your ground-glass again. That picture with the large white mat comes right on the edge of the view. It will lead your eye out of the composition. Change that glaring bit of white. There is another frame marred by a dazzling reflection. Is it not possible to change the direction of the light? If not, remove the frame.

Now look at your mantle, or table, or piano. Is it cluttered up with an endless array of photographs, vases, etc.? See how much you can remove and still retain sufficient interest. Strive for simplicity, instead of tiring the eye with a meaningless profusion of objects. A few simple reeds, grasses or flowers, when gracefully arranged and properly placed, will work wonders.

If your lens has a wide angle, be careful what objects you have placed in the foreground, as they will be more or less distorted. I would seldom use a wide-angle lens when aiming for an artistic result.

Chairs placed near the sides of the picture look better when turned somewhat toward the center. White tidies on chairs are likely to become glaring white spots in the picture. Treat this matter with discretion.

The windows which come within range of your lens will very likely print too white, even if you have taken precautions to prevent halation. Hang a black cloth or a shawl on the outside during all but a small part of your exposure. If possible, have the light come through the upper portion of the window, screening the lower portions.

Now comes the question of exposure. Give plenty of time — still a little more; then tank-develop and you have helped to overcome the violent contrasts characterizing most inside work.

None of us makes perfect negatives all the time. We all misjudge conditions or have to make the best of them, so we must correct our errors by after-manipulation of the negatives.

Perhaps a straight print from your negative shows several too-white blotches, or a light spot in the wrong place. Paste two sheets of vignetting-tissue on your printing frame. Now hold it to the light and on the tissue mark the outlines of those dense spots, cutting away with a pin the included area. It may be necessary to paste on and cut away more than one extra tissue to tone the spots down enough; but always leave



on one tissue to diffuse the direct light. If you wish to accent an important object by lightening it, rub a little powdered black crayon-sauce on the tissue over that point. Use the same method for holding back too deep shadows. Your eye will soon indicate just what to do before even making a proof. Local reduction by chemicals on the negative can, of course, be resorted to; but I prefer the foregoing method as safer for those not expert. Lines or small areas may be subdued on the negative with the etching-knife or "negaphake," or by rubbing down with a reducer made by mixing vaseline and pumice-stone to a paste and applying with a rag over a round-pointed stick covered with chamois-skin.

The almost universal custom of finishing interior work on glossy paper is anything but pleasing. When the prints are for reproduction, well and good; but then only should they be

done so. A dull paper with a grain slight enough to subdue detail without destroying it, suits me the most. I, personally, use a platinum-surface development-paper which has the capacity to give soft effects. It has great latitude, tones to a beautiful sepia, and will bring out all the quality of the negative. Any of the leading makes of gaslight-papers has satisfactory surfaces and grades to suit the most exacting user. For giving my preference to developing-out-papers I have a reason. The ease with which one can quickly change the developer for soft results, contrasty effects, this tone or that shade and the ability to print by artificial light make it invaluable to the pictorial worker who has little spare time. And how easily and quickly one can make a proof to see if the after-manipulations have been correct!

Seldom does one see a commercial view



AN ARTISTIC INTERIOR
EDWARD H. WESTON

mounted on anything but a stiff card, bought at the nearest supply-house, with no idea of suiting the picture to be mounted thereon. As in portraiture or pictorial landscape-work, the mount should be in harmony with the print. It should not be the first thing to greet the eye. It ought, rather, to help put forward and enhance the beauty of the picture. Every pictorial worker should impart individuality to his work, and making his own mounts from the large selection of cover-papers and boards on the market is a step in that direction.

As a last word, I would suggest to the earnest student that he read books on composition. An excellent one is by Arthur H. Dow. Another good one is Poore's "Pictorial Composition and the Critical Judgment of Pictures," which contains many valuable interiors of great interest to all earnest workers.

The Perfect Lens

LET some genius invent a perfect lens which will draw detail Where he wants it, and How he wants it, and When he wants it; let him make a Fine Negative; let him make a Fine Print; let him call the artists and critics together and say: "Sirs, I have discovered a Perfect Method of Working in Monochrome."

Then if they be both connoisseurs and honest men, they will answer what they will answer.

— A. J. Anderson.

THERE are psychological portraits in which every trait is subordinated to moral expression; there are mundane portraits which are clear and expressive, but less profound than graceful; there are portraits expressive without familiarity, individual and vivid, but generalized in careful regard to form. — *David de La Gamme.*

A PEACEFUL VALLEY



O. B. JUDSON

EDITORIAL

Only a Penny

IT is easier to accept than to investigate. This has come to be recognized as a truism. It signifies the tendency of most people who are not critical or discriminating to follow any whim or caprice of the public — just like a flock of sheep. The thought of verifying a statement by reference to an accepted authority — be it a person or a publication — occurs to but few, and this lazy habit results in the prevalence of many popular errors, both written and spoken, with regard even to the simplest of topics.

Photography, treated as a practical science, permits few mistakes to go forth, although the occurrence of casual typographical errors is almost impossible to prevent. Nevertheless, unless he is of a discerning mind, the practitioner is very likely to fall into the error of a correspondent who experienced no little trouble when using a developer, the formula for which he had read in an English cotemporary. The directions called for a quantity of glycin equivalent to the weight of a penny. Although the developer was carefully compounded, the practitioner failed to obtain good results; he then applied to PHOTO-ERA for relief. The Editor advised him to prepare another solution, following the instructions as closely as possible. Still the results were unsatisfactory. Thereupon the Editor asked him to forward the coin, so that he might note to what extent it had been worn; and what do you suppose he received? A one-cent piece of United States currency! The penny, being an English coin, called for one hundred and forty-six grains, the weight of one new or nearly so. The American one-cent piece, when new or not much worn, weighs forty-eight grains; but our correspondent fell into the error of not distinguishing between the character and the weight of the two coins. As a matter of fact, the one-hundredth part of a dollar is a cent; *it is not a penny!* Our friend's carelessness in not ascertaining the weight of a penny caused him no little inconvenience.

Our attention has been called to a statement in a recent issue of an American house-journal, which prints a list of weights, in grains, of current American coins in silver, nickel and copper, the smallest being called a penny, and not, as it should be, a cent.

This brings up the question of a pennyweight. This is a troy weight containing twenty-four

grains, or the twentieth part of an ounce. It was anciently the weight of a silver penny, hence the name.

A Spurious Advance in Portraiture

A FRIEND, recently returned from Europe, showed the Editor a few portraits by a practitioner who is rigidly opposed to studio-lighting of any sort and who advocates portraits (whether by photography, painting or any other medium) of persons just as we see them, regardless of light-conditions. Thus, he has represented one client with bright white streaks across his face, caused by the close proximity of a window composed of numerous small panes of leaded glass. Another sitter is reposing on a fence with the setting sun directly behind him, his face being quite dark and the features scarcely distinguishable. Another patron appears in the act of cleaning his finger-nails, and the distorted mouth suggests that this operation is not an entirely painless one. Still another portrait — probably a strong characterization — shows the sitter with the left eye nearly closed and the chin projecting upwards. The person was probably suffering from a nervous affection; but why portray it? Then there is a portrait of an actress who stands on the stage directly in front of the footlights — a ghastly apparition with the shadows of face and figure running upwards. A business-man at his desk is portrayed directly facing a low window, producing an effect absolutely flat and monotonous. The portrait was unmistakably taken during working-hours, for the ends of his thumb and index finger are covered with ink, and the ends of his cravat, which is forced from its accustomed place, are resting near his left shoulder. Another patron of this very modern portraitist seems to have the habit of pulling the lobe of his right ear, probably when trying to solve a difficult problem. It seems to be a characteristic attitude, emphasizing his personality, as it were, and the artist was quick to perceive and seize this precious moment.

There were other professedly honest portraits which disclosed some striking peculiarity, but never flattering to the personal appearance of the sitter. We looked for the likeness of a parvenu eating with his knife, but our faithful delineator and lover of truth had probably forgotten to include it in the collection.

THE ROUND ROBIN GUILD

An Association of Amateur Photographers

Conducted by ELIZABETH FLINT WADE

This association, conducted under the auspices of PHOTO-ERA, and of which PHOTO-ERA is the official organ, is intended primarily for the benefit of beginners in photography, although advanced camerists are just as welcome and many are numbered among its members. The aim of the association is to assist photographers by giving them information, advice and criticism in the Guild pages of PHOTO-ERA and by personal correspondence. Membership is free and may be obtained by sending name and address to PHOTO-ERA, The Round Robin Guild, 383 Boylston Street, Boston. Send a stamp for complete prospectus.

Thoughts for Christmas

"Printed at the Cawcross Press in the ward of Farringdon, City of London, a few yards from Fleet Market, the assembling place of the Rioters, which is described in "Barnaby Rudge."

THE above is the quaint imprint on a little illustrated booklet entitled "Thoughts for Christmas," being quotations about Christmas taken from the works of Charles Dickens, whose centenary is about to be celebrated by all the world. Dickens, of all our authors at home or abroad, is the truest expositor of Christmas, and the reason is because his motto was, "I will honor Christmas in my heart, and try to keep it all the year." It might well be said of him what he said about one of his characters, —

"He knew how to keep Christmas well, if any man alive possessed the knowledge."

The choice quotations comprised in this little book give as vivid pictures of Christmas as if they had been written about our 1911 holiday.

"The brightness of the shops where holly-sprigs and -berries crackled in the lamp-heat from the windows, made pale faces ruddy as they passed. * * * If you had judged from the numbers of people on their way to friendly gatherings, you might have thought that no one was at home to give them welcome, instead of every house expecting company and piling up its fires half-chimney high."

The illustrations are charming, and Tiny Tim might have been taken from life instead of being a sketch. The combination of quotations and pictures suggests to the editor the possibilities of similar books which are within the capabilities of the ambitious amateur. Not necessarily Christmas quotations, but any others which lend themselves to illustrations, the illustrations of course to be the work of one's camera. For a Christmas book one should begin early in the year and make his pictures while Christmas decorations still hang on the walls, for though it may seem a long look ahead, yet time is fleeting and before we are aware another Christmas is dawning. One might collaborate with a fellow-craftsman and get out a booklet in company, one to furnish the text and the other the pictures. It does not cost a great deal to get a booklet printed, but it does cost for the illustrations. The way to do is to make the illustrations and paste them into the book after it is printed. Blank leaves are left for the pictures, which should be made on India paper or Japanese tissue and attached to the leaves by the top only. Two working together in this way might at very small expense produce a booklet which would answer the question "what to give for Christmas," for anyone would prize such a gift. There is a very charming story attached to the making of this Dickens Christmas book. The quotations were originally comprised in a small book for private circulation

among friends at Christmas in the same way as just suggested for the making of a booklet, the compiler and the printer both being Americans and the book being issued in one of our large cities. The young man who printed the book has gone to London on business and has gotten out this special edition of the book out of regard for his friend, a well-known educational and philanthropic woman, a true "Christmas spirit" à la Dickens.

Christmas always seems to take us unawares. We are never quite ready with our gifts and remembrances, so let us take time by the forelock another year and do something which may turn out to be something very well worth while. There are great possibilities in one's photographs. Not enough attention is paid to the decorative side of photography. For instance, who of us thinks of photographing twigs of trees denuded of leaves? Yet one may by a judicious selection of subject get some very artistic studies. The Japanese are still our leaders in using objects in Nature for purely decorative work, for they seem to seize the very subject which lends itself to this phase of photography.

Lanterns, not for light but for ornament, may be made very quickly and are pretty gifts. They might be called "last minute" presents, so easily are they made. A square tin can such as olive oil comes in is the foundation of the lantern itself. In the center of each panel cut away enough of the metal to leave an opening just large enough for a small transparency, leaving small pieces of tin which bend back and hold the glass in place. Puncture the tin full of holes, following some sort of geometric pattern or else a vine- or leaf-design. The top of the can is cut away and the bottom has openings cut in it to allow for ventilation. A soldier's candlestick will be the best thing for the candle as there will be no drip but what is caught in the saucer. The transparencies may be in blue or in black and white, or toned to any of the colors possible in lantern slides. Choose some subject which has rather pronounced outlines. A negative with too-fine detail does not show up well in an ornament of this kind. If the lantern is to be given to someone fond of the water and boating, choose marines, pictures of boats being extra good in the blue transparency. One may gild the lantern or, if one is fortunate enough to live near a manufactory of metal articles, can have the lantern dipped for a few cents and it will then be a polished brass lantern—very attractive when mounted with blue transparencies. Slender brass chains are attached to each corner of the lantern by which to suspend it.

Anyone skilled in working with wire can fashion a lamp-shade and in the openings left for pictures put in prints made on thin paper, which are almost as good as glass transparencies. They may be rendered more translucent by waxing, though when the shade becomes heated the wax may run a little unless it has previously been well absorbed by blotting-paper.

A very attractive and highly-prized gift is a copy of



THE BRONX WOODS IN SUMMER

FIRST PRIZE — WOOD-INTERIORS

DR. D. J. RUZICKA

an old daguerreotype of a cherished member of the family like the dear old grandmother or grandfather. Copy the daguerreotype, finish it in red carbon, or warm sepia on celluloid, and frame it in a narrow oval frame of wood. In copying the picture the best way is to take it from the frame, remove the glass and make the copy as near the size of the original as possible. Great care must be taken in handling the old picture as the surface of the copper scratches very easily, but there is no need to injure it.

A clever little Christmas remembrance for the immediate members of the home-circle, such as cousins and aunts, is a set of photographs of each member of one's family, vignetting the negatives to show only the head, and mounting them in a long panel and labeling the picture, "Heads of the Family." There are many ways in which pictures may be utilized for Christmas remembrances.

The Beginners' Camera Club

MR. H. LADD WALFORD's admirable article on the organizing and management of a camera club has brought to the editor of the Guild letters from members in various parts of the country asking just how to begin a camera club. That is the simplest thing in the world. It takes only one person to begin a thing. Three people can organize a club, a society or a business. Matthew Arnold it was who said that the main thing American people did was to form organizations. He said that where two or three Americans got together they always organized something. Now, that being the conclusion which Matthew Arnold drew of our capabilities, one can see at once that to organize a camera club all that is necessary is to get two or three interested amateurs and the thing is as good as done.

These three people should make a list of the amateurs living in their town who are likely to be interested in such a project and send them invitations to attend a preliminary meeting. Nine out of ten will respond, for there is no craft or art which produces greater good-fellowship than the pursuit of photography.

The calling of a meeting may seem a formidable thing to the young amateur, but he must make his plans beforehand and, if he is not a ready speaker, he must put in writing the things he wishes to say. The person whose name is signed to the invitation is by courtesy the chairman of the meeting. His first official act will be to appoint a secretary *pro tem.*, meaning a secretary for that meeting only. This may be one of the persons who started the plan or it may be one who has been invited to the meeting. The chairman then states the object of the meeting, the benefits to be derived from such an association, and ends by asking how many present are in favor of forming a camera club. This is called "taking the voice of the meeting."

Now, if the chairman is not accustomed to public speaking and feels that he cannot say off hand what he wishes to, he could read extracts from the article by Mr. Walford, choosing the points which best express in brief the good derived from the banding together of amateurs in concerted photographic work. Suppose that there are twenty-five present and only ten express a desire to organize a club. Do not be discouraged — a small club is often more helpful to its members than a large one. Once the club is started and in running order there will be plenty who will wish to join it.

The officers of a club are the president, vice-president, secretary and treasurer. In most societies it is customary to have a board of directors, the officers being elected from the board. There should be at least twelve



THE WOODS

JOHN DOVE

SECOND PRIZE — WOOD-INTERIORS

members of the board, four of whom retire annually, while the term of office of each is three years. At the organization of the club the length of the terms of the members of the first board is decided in this manner, it being the simplest: The board is first chosen by lot, the names of those wishing to form the society being put into a box and the secretary drawing out twelve names one after the other. The first four drawn out are those who will serve three years, the second four to serve two years, and the remaining four to serve one year. Thus one has at the outset four members of the board who will retire at the end of the year. The first duty of the board will be to meet and elect officers, and usually the chairman who called the meeting and his associates are thus honored. In case a large number are found who wish to form the club, a better way of choosing the board is to appoint a nominating-committee, which shall present twelve names for the first board. If these are acceptable — and they usually are — some one should move that the secretary be directed to cast the ballot for the board.

If, however, there are less than twelve persons to form the club, or only twelve, it is better simply to elect officers and leave the matter of a board of directors until the club has grown large enough to warrant such a body.

The first business of the club is to choose a name by which it is to be called. For convenience in locating and also to give the club a certain standing it is a good idea to name it after its town. This is desirable in another sense, for in correspondence it at once enables the non-resident to locate the club. The first members of the club are called charter-members, and are admitted to the society without election. Those who wish to join after the club is formed will have to be admitted by

election. It is always an honor to be a charter-member of an organization and to make it an object to join the club the charter-members might be allowed some special privilege, such as a reduction in membership-fees.

The amount of the fee is fixed by the character of its members. If the club is composed of young amateurs, the fee should not exceed fifty cents, for young people have, as a rule, more ways to use money than they have means at their command. The question of a clubroom in a small town is easily solved. Usually some merchant is willing to allow the use of a vacant room over his store, or, if nothing better offers, a barn is not to be despised. As for the furnishing, each member will be willing to contribute something, and a few boards stained and shellaced will furnish all the shelf-room necessary for some time. A darkroom can be improvised. If running water is not to be had, a tank with a faucet will be a fair substitute.

Every organization must have rules and regulations for conducting the business of the club. These should be as simple as possible but must be adhered to strictly. The rules are called the Constitution and the articles may be limited to five: Name; Object; Officers; Members; Amendments. Under bylaws would come the heads of Meetings; Duties of Officers; Membership-Dues; Elections; Committees; Order of Business; Amendments. It is much easier to conduct a club according to rules than in a haphazard way. The rules simplify and settle many questions which otherwise might cause much discussion, and they give the officers a good drill in parliamentary practice if they are adhered to rigidly. Even though the members are young, they should observe parliamentary etiquette. In a meeting the member wishing to speak should always address the presiding officer as Mr. or Madame President,



THE OLD MILL

FIRST PRIZE — VACATION-PICTURES

EDGERTON GARVIN

rising when he wishes to speak or to put a motion. When a member rises to speak he says, "Mr. President," and the president in turn speaks the member's name and usually stands while the member is speaking. The president always stands when putting a motion or in addressing the club on any subject. Although these forms may seem rather stilted to a club of young amateurs, they should be observed and when the member has graduated into more important bodies, or the club itself has grown to be an important factor in the institutions of the town, he will not have to unlearn bad or learn new ways.

For the decoration of the clubroom the work of the members will be placed on the walls, but right here is a place for a good suggestion. Do not cover the wall with photographs. Place a few fine prints here and there, let them remain up, say, a month, then replace them with others. By this means each one has a good chance to have his best work seen and the walls will not have that spotted appearance seen in many camera clubs where the whole wall-space is crowded with pictures. Each picture should have its title and the name of the artist written so that one may see it at a glance. A catalog is more or less of a nuisance, and one takes a great deal more comfort looking at a picture plainly labeled. A dark-green burlap or an ingrain paper makes a good background against which to display most pictures. Brown is good, but there are so many shades of brown in mounts that green is the wiser choice.

We hope to hear of the formation of many new camera clubs, particularly in the smaller towns remote from cities, places where just such organizations will prove helpful to their members, and the editor of the Guild is always ready to tender help and suggestions in getting them started.

For the Scrap-Book

A TEN per cent solution of potassium bromide is one of the most serviceable chemicals one can have in the photographic laboratory. If a plate comes up quickly, showing that it is over-exposed, add a few drops of the solution to the developer and save the plate. If gas-light-prints come up too quickly, add the bromide, thus retarding the development, making it even and bringing out a good print.

VERY attractive card mounts may be made of the ingrain wall papers in soft tones. They are not heavy enough to use without backing but are stiffened by being attached to a piece of plain cardboard. This paper makes very attractive books in which to mount one's prints. When buying the paper select the heavy, as it not only keeps its shape better, but comes in much more artistic tones than the cheaper grade.

A THIMBLE plate-lifter costs 15 cents. Make one for yourself by paying a cent for an aluminum thimble, cutting out a triangle of tin long enough to extend half an inch beyond the thimble, and with its base much narrower than its sides. Solder this piece of tin to the thimble and one has as good a lifter as that costing fifteen cents, and with the fourteen cents saved can buy printing-paper which one is not able to make.

FADED prints may be restored by soaking them in the following solution: Gold chloride, 3 grains; water, 4 oz. Neutralize the bath and soak the prints in it till they come up clear and bright. Wash and fix in: Hypo, 1 oz; water, 20 oz. Wash again and dry.

GROUND-GLASS VARNISH. Dissolve 90 grains of gum sandarac and 20 grains of gum mastic in 2 oz. of ether and add 1/2 to 1 1/2 oz. of benzole.



A WOODLAND MONARCH

RUPERT BRIDGE

THIRD PRIZE — WOOD-INTERIORS

Photography as a Hobby

TYLER S. ROGERS

THERE are many people who would like to take up photography as a hobby, but are restrained by the idea that it is rather expensive. So it is, if one takes pictures of every friend he meets, of every place which looks well in the finder, and of every landscape that is pretty, regardless of its composition or its pictorial value, and then has his film developed by a photo-finisher. But I believe that a person taking up photography as a hobby may not only make it pay cash, by a little extra work, but may make it pay him in pleasure and in the added knowledge he gains by it. I propose to back up the latter statement by the following account of my own experience of a year. I shall not argue that he can make it pay cash; that has already been discussed by Mr. Frederick F. Ames in the June PHOTO-ERA in an article entitled, "Making Your Vacation Pay."

In August, 1910, I purchased a small box-camera and an equipment consisting of four trays, a printing-frame, a darkroom-lamp, a few rolls of film, some paper and other materials, the whole costing less than five dollars and a half. I hoped to learn the principal points of good photography by experience and at a minimum expense. I began by keeping an account of expenditures.

I started with a few trivial subjects, among them an exposure of a boy diving. I developed the film with a

friend who knew how, and after examining the result I had learned at least one thing, namely, that I couldn't take an instantaneous exposure of a person diving, while standing only six or eight feet away. I did get an excellent print of the water and the shore, barring, of course, the diagonal white streak showing where the diver struck the water. From that same film I learned that a thorough washing is essential after fixing, for in a day or two the negative became discolored.

Then I went down to Maine for a week, armed with the camera and a half-dozen films, and full of ideas about surf, sailing-vessels, shore-scenes, and woodland scenery. In that week I ground twenty-two exposures through my camera and, after development, I was further educated on the subject. I learned a bit about how bright the sky and water are, and also how bright the woods are not, how fast the spray dashes from the rocks, and a multitude of other minor facts. But I do not regret those few failures, for I have from that same lot some which I cherish among my best.

During the winter I slackened work in photography, for other things occupied my time, but I managed to try a hand at interior-exposures, portraiture and snow-scenes.

Spring came, and my camera work increased. In May I took a bicycle trip to a little country town where I used to spend my summers. There I took a few pictures, among them an exceptionally pretty landscape, showing a lane, bordered by apple-trees losing itself in the background around a bend and down a hill.

One afternoon while I was away a friend, who is an "expert amateur" with the camera, was visiting at the house. He was shown my album (not very interesting to him, I fear) and not until he came to the picture of the lane did he express any particular interest. That one, however, pleased him very much, and he wanted to borrow the negative to have enlargements made.

When I returned and was told his opinion of the print, I saw new merits in that particular negative, and took several prints from it. Then a few days later, when reading a copy of PHOTO-ERA, I saw the Beginners' Contest, subject, "Spring-Pictures," and resolved to enter my pet picture. Result: a week or two later I received a letter from the editor awarding me third prize. That concluded my year of picture-making.

During the year I spent in all just twelve dollars and seventy cents, including the first cost of the camera and outfit. In return I have about six dozen negatives, of which about one-half are worth keeping, and of these a half-dozen are worth enlarging; about one hundred and fifty prints; a fundamental knowledge of the various branches of photography, and an ability to tell roughly the principal merits or faults in a print.

Now, does that account back up my statement? Who wouldn't spend a dozen dollars to be able to take a picture that is eligible to a competition in a high-grade photographic magazine? Again, will that sum of money purchase in any other way the knowledge I have gained about the art of picture-making in general, composition, good balance, correct exposure, various printing-methods and so on? True, I have not learned all, and never expect to; but I have gained what I sought—a fundamental knowledge—and all for about one-third the amount many amateurs put into a camera alone.

I believe that I have answered the statement that a man can make photography pay him in the pleasure and in the added knowledge he gains by it. Can any hobby do better?

[The Editors are always glad to consider short articles like this from our readers.]

Sensitizing Paper for Green Tones

THOUGH one may buy paper particularly prepared for producing green tones, yet a wider range may be obtained on paper which one sensitizes himself. The process is simple and the tone of the print very desirable for decorative work. Make up a solution of uranium nitrate, using 24 grains of the chemical to each ounce of water. Float the paper on this solution for one minute, drain, and hang up to dry in a darkroom. The image is not visible on the paper but is brought out by development. For a medium-dense negative it requires an exposure of about ten minutes. The developing-solution is made of red prussiate of potash, 10 grains to each ounce of water. When the print is taken from the frame, place in a tray of hot water, about 120° F. Leave it for half a minute, transfer to another tray and flood with the developer. The picture will appear very quickly and be of a beautiful red color. Let it remain in the developer until the desired strength is obtained, then wash in clear water until no color runs from the print. While still wet lay it in a tray and flow with a ten per cent solution of nitrate of cobalt. Dry by heat without washing. To render the tone permanent, the print should be fixed in the following bath: iron sulphate, 120 grains; sulphuric acid, 120 grains; water, 6 oz. Leave the print in this bath one minute and again dry by heat. The many baths seem rather a complicated process, but it is really very simple and the solutions may be used several times. The tones of the green may be varied by leaving the paper a longer or a shorter time in the bath of cobalt.

Print-Criticism

Address all prints for criticism, enclosing return postage at the rate of one cent for each two ounces or fraction thereof, to ELIZABETH FLINT WADE, 743 East 27th St., Paterson, N. J. Prints must bear the maker's name and address, and should be accompanied by a letter, sent separately, giving full particulars of date, light, plate or film, stop used, exposure, developer and printing-process.

THE DESERTED GARDEN. L. F. S.—The artist has chosen a rather unusual subject for his picture, that of a garden given up to weeds and waste. He has, however, treated it in an excellent manner, has chosen the right hour of the day for such a picture and has really succeeded in making it very interesting. The foreground shows tall weeds which cast long, faint shadows across the grass-grown path. In the middle distance of this rather "short view" is a pile of stones where once may have stood a sundial, at the right stretches a broken stone-wall and beyond one catches a glimpse of fields. The sun is low and shining from behind the clouds. Taken altogether this is a very good picture; but, like so many which come to the editor's desk, it is not mounted harmoniously. The mount is commercial and the picture pasted flat on the surface with an even margin all round. In this day of artistic finish to pictures it behooves the amateur to take pains to choose a fitting mount for his picture and one that will bring out its good points instead of detracting from them.

PORTRAIT. C. S. C.—This is a portrait of an elderly lady which, while good in technique, is not all what a picture of this kind should be. The subject is well placed on the plate and the background, which is rather dark, is far enough away from the sitter and has just enough detail in it to give an atmosphere to the picture. The lighting of the subject is very poor, being too flat altogether and coming at such an angle that it emphasizes the hollows at the sides of the chin and the droop of the flesh in the cheeks. These shadows should be lightened by soft retouching, as should also the lines at each side of the mouth. The white cuffs on the sleeves, though of soft muslin, make spots of highlight which draw attention from the face and detract from the artistic merit of the picture. The dress is dark, simply made and well-suited for such a portrait. With so good a subject and the proper lighting the artist ought to get a portrait-study well worth while.

AT THE WINDOW. F. R. A.—This is a not altogether successful attempt at window-portraiture. It shows a girl seated at a lattice window through which the light falls very strongly upon her face and hands. The window is at one side and the head of the subject comes against the dark wall—an arrangement admirable in itself but in this instance not very happy, for the colors of hair and background are exactly alike, both being in deep shadow. An elbow is on the windowledge and the head rests on the hand; the other hand and fore-arm lie on the lap. The light is so sharp on the arms and the shadows so black that all modeling is lost and at a little distance they look like two straight lines at different angles and not a part of the figure. The light on the face is not so bad, for although the side turned toward the window is very strongly lighted the shadows at the side are soft, the only really good lighting in the picture. The gown is of some thin material which has not caught the light so intensely and has very pleasing lights and shadows. The composition of the picture is good, lighting and exposure are bad.



VACATION-TIME

THIRD PRIZE — VACATION-PICTURES

THE BROOK

SECOND PRIZE — VACATION-PICTURES

W. W. RICHARDSON

ROBERT MUNS

The Round Robin Guild Monthly Competitions

Closing the last day of every month.
Address all prints for competition to PHOTO-ERA,
The Round Robin Guild Competition, 383 Boyl-
ston St., Boston, U.S.A.

Prizes

First Prize: Value \$10.00.

Second Prize: Value \$5.00.

Third Prize: Value \$2.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning picture, or in later issues, will be given Honorable Mention.

Prizes may be chosen by the winner, and will be awarded in photographic materials of any nature sold by any dealer or manufacturer who advertises in PHOTO-ERA.

Rules

1. These competitions are free and open to all photographers, whether or not subscribers to PHOTO-ERA.

2. As many prints as desired, in any medium except blue-print, may be entered, but they must represent the unaided work of the competitor from start to finish, and must be artistically mounted. Sepia-prints on rough paper are not suitable for reproduction, and such should be accompanied by smooth prints on P. O. P. or black-and-white paper having the same gradations and detail.

3. The right is reserved to withhold from the competitions all prints not up to the PHOTO-ERA standard.

4. A package of prints will not be considered eligible unless return postage at the rate of one cent for each two ounces or fraction is sent with the data.

5. Each print entered must bear the maker's name, address, Guild-number, the title of the picture and the name and month of the competition, and should be accompanied by a letter SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in letter.

6. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA. If suitable, they will be reproduced, full credit in each case being given to the maker.

7. Competitors are requested not to send enlargements greater in size than 8 x 10 or mounts larger than 12 x 15 unless they are packed with double thicknesses of stiff corrugated board or with thin wood-vener. Large packages may be sent by express, Section D Rates, very cheaply and with indemnity against loss.

Subjects for Competition

October — "Rainy Days." Closes November 30.
November — "Christmas-Cards." Closes December 31.
December — "Home-Scenes." Closes January 31.
January — "Winter-Landscapes." Closes February 29.
February — "Woods in Winter." Closes March 31.
March — "Window-Portraits." Closes April 30.
April — "Spring-Pictures." Closes May 31.
May — "Decorative Treatment of Shrubs and Flowers." Closes June 30.
June — "Outdoor Portraits." Closes July 31.
July — "Tree-Studies." Closes August 31.
August — "Outdoor-Sports." Closes September 30.
September — "Street-Scenes." Closes October 31.
October — "Autumn-Scenes." Closes November 30.
November — "Interiors with Figures." Closes Dec. 31.
December — "Cats and Kittens." Closes January 31.

Awards — Wood-Interiors

First Prize: Dr. D. J. Ruzicka.

Second Prize: John Dove.

Third Prize: Rupert Bridge.

Honorable Mention: Arthur Boniface, E. S. Hodges, D. Edward Jones, T. L. Mead, Jr., Clara J. Monroe, W. B. Morrison, Mrs. S. B. November.

BEGINNERS' COLUMN

Quarterly Contests for Beginners

In these contests all Guild members are eligible PROVIDED THEY HAVE NEVER RECEIVED ANY PRIZES OR HONORABLE MENTIONS in the past, FROM ANY SOURCE, AND PROVIDED ALSO THAT THEY HAVE NOT BEEN MAKING PHOTOGRAPHS MORE THAN ONE YEAR.

All prints submitted, except prize-winners, will be returned if postage is sent in a separate letter with the data. See rules 4 and 5 in opposite column.

Prizes

First Prize: Value \$5.00.

Second Prize: Value \$2.50.

Third Prize: Value \$1.50.

Honorable Mention: Those whose work is worthy will be given Honorable Mention.

Awards — Quarterly Competition

VACATION-PICTURES

First Prize: Edgerton Garvin.

Second Prize: Robert Muns.

Third Prize: Winfield W. Richardson.

Honorable Mention: George F. Brookhart, A. W. Davis, F. C. Eveleth, Frank Garnier, Benton Shook.

Subjects for Competition

GENERAL — OUTDOORS — CLOSING JAN. 15, 1912

Any subjects, landscapes, figure-studies, genre, marines and animals.

GENERAL — INDOORS — CLOSING APRIL 15, 1912

Similar to the one above, but strictly interior-views.

A Word About the Subject

IN choosing the subjects for the two quarterly competitions closing January 15 and April 15, the editor has borne in mind the fact that it is not until the beginner has become something of an adept in the use of his camera that he attempts to specialize. Consequently these two competitions give the competitor a wide latitude both in subject and the treatment thereof, the only restriction being that the picture itself must be taken outdoors in the one, and indoors in the other.

For the outdoor picture one may choose a pleasing landscape or look about for a fine genre-study. He may prefer waterscapes and may take them of any type which pleases his fancy; or, if he lives inland and is successful in the making of animal-pictures, he may go out into the pastures and search for his models.

Whatever the subject chosen, the beginner should strive to make of it the best negative he can, and from the negative to make a print as good as he can produce. After the print is made, if there are parts around the margin which detract from the composition they must be trimmed away.

On no account send an unmounted print. Choose a paper which harmonizes or contrasts pleasantly with the tone of the print. Allow plenty of margin and mount the print so that the margin of the mount is wider than at the top. Note "A Stumbling-Block" in November PHOTO-ERA.

Answers to Correspondents

Readers wishing information upon any point in connection with their photographic work are invited to make use of this department. Address all inquiries to ELIZABETH FLINT WADE, 743 East 27th Street, Paterson, N. J. If a personal reply is desired, a self-addressed, stamped envelope must be enclosed.

W. T. SMITH. — The Advantage of Potassium Metabisulphite in a developer is that it does not oxidize as rapidly as sulphite and hence the developer keeps longer in an unstained condition. It costs 20 cents for a bottle containing 4 ounces. A pyro formula with metabisulphite is made as follows: No. 1. Pyro, 48 grains; potass. metabisulphite, 48 grains; water, 8 oz. No. 2. Sodium carbonate, 1/4 oz.; water, 8 oz. To use, take equal parts of both solutions.

MARCUS TALCOTT. — A Liquid Color-Screen is made by taking two glass disks and cementing them to a ring with a small space between in which is put a colored liquid. They are used in place of a colored glass screen in orthochromatic work, and by some photographers are preferred to the glass, though not so practical for outdoor use.

LEONA DAKE. — Sizing for paper is any mucilaginous substance which when spread on paper and dried renders it less pervious to water and also hardens its texture. Albumen (from eggs), gelatine, dextrin, starch, collodion, etc., are used in photography for sizing papers. To size the paper, dissolve the gelatine in water and put a little of it into a shallow dish larger than the paper to be sized. The dish must sit perfectly level and there should be only enough of the sizing in the dish to make an even depth of perhaps an eighth of an inch. Take the paper by the longest edge and bending back the sheet in a curve put the edge in the liquid and gradually lower the whole sheet, pressing it down into the dish so as to exclude any air bubbles that may form. Let it remain for a minute or two, then hang it up to dry. This is the method by which an amateur may size his paper, but one may have this done at a regular dealer's and save one's self much time and trouble besides being sure that the paper will be sized evenly. When dry it is ready for the sensitizing solution.

FRANCIS GOOD. — Yes, you can Copy Daguerreotypes with your camera and can make a picture as clear as the original, only it will doubtless be lower in tone as is the case in copying most photographs. Place the picture in as strong a light as possible, preferably out-doors, and have the image upside down so that it will appear right side up in the camera. Be sure that the picture is placed at the proper angle so that the image is seen clearly in the camera. If you get a good negative and then make a print on celluloid, tone it in sepia and mount in an oval frame, the picture will have the appearance of a monochrome on ivory.

BELLE THORNTON. — To Label Black Bottles get white-enamel paint and a small brush and write the name on the bottles in rather large letters. This paint will not wash off once it has dried, and the title may be seen readily in the darkroom, a very desirable feature for any label.

C. C. F. — The camera about which you ask was called the **Pantascopic Camera** and was a sort of panoramic camera and really quite an ingenious instrument. It revolved on a circular plate and thus could be made to include the entire horizon on one plate with equal definition and with equal illumination. It long

ago passed out of use, our modern panoramic camera being a far more satisfactory instrument.

E. E. DARROW. — The Retouching Varnish about which you ask is made by dissolving 30 grains of powdered resin in 1 oz. turpentine. Apply a very thin coat to the parts of the negative that need retouching and let it get thoroughly dry before attempting to retouch. Powdered pumice stone rubbed on the surface of the negative will give "tooth" enough to take the pencil well and in most cases answers the purpose of a retouching-medium as well as if not better than the varnish, besides being easy to remove if the work is not satisfactory.

HELEN J. — To Make Silhouettes the way you suggest, first have the subject's shadow thrown on the wall, using a strong light and placing the subject quite near the wall. Pin a paper to the wall and with a sharp soft pencil mark the outlines of the shadow on the paper, taking special pains with the profile. Cut the picture out carefully, then cut a duplicate from black needle-paper, paste it on white cardboard and copy it in the camera. You can then make from the negative as many pictures as you choose and if printed on plain platinotype or smooth velox they will have the appearance of the old-time scissored silhouette. The name "Silhouette" came from the name of the inventor Etienne de Silhouette, who is said to have been a remarkably skillful manipulator of the scissors.

F. L. KEENE. — Methylated Alcohol is commercial alcohol to which ten per cent of wood naphtha has been added, hence the name by which it is most generally known — wood alcohol. It is used in place of alcohol for varnishes, drying negatives, spirit lamps, chafing dishes, etc., because it is so much cheaper. If you use it be sure that it bears the label "Poisonous!"

SAMUEL O. P. — You will find in any work on **Astronomical Photography** not only the explanation of this wonderful phase of scientific photography, but also a history of its progress. Henry Draper, who was among the first Americans to take up the study of lunar photography, succeeded in making a fine daguerreotype of the moon after more than a hundred trials. When the wet collodion process became known a man by the name of De la Rue made a splendid negative of the moon. It is said that two Paris scientists named Henry have so far made the best photographs yet obtained of the moon, though it is to be doubted if they exceed those made at our own observatories.

D. I. V. — Do Not Try to Restore your Platinum Paper by the process you mention, in fact do not try to restore it by any process. Choose a strong negative and make a print on the paper in the condition it now is and see if you are not pleased with the results. Old paper often gives very artistic prints, though it does not work well except with good-printing negatives.

ARTHUR M. — Acetic and Citric Acids are used for the same purpose in photographic work, but the citric is considered superior to the acetic. Their use is to clear bromide-prints from all traces of iron when a ferrous-oxalate developer is used, to prevent fogging during development, render the development slow and even; and it is used in the fixing-bath to change the color of the prints to brown or red.

MARCIA D. — A Pencil for Writing on Glass or China is the Faber blue-pencil. It is used also for working on the glass side of a negative in retouching out defects in negatives. It is a very useful bit of apparatus and one can often bring up to par the printing-qualities of a negative by simply using the blue pencil judiciously on the glass side of the plate. If the work is not successful the first time, one can rub it off.

K. L. D. — Multiple Mounting is the mounting of

a print on three or more pieces of paper. These mounts are cut just a trifle larger than each other so as to show only an edge or line, and then the whole is placed on a large mount. One must have a keen eye for color-effects when using multiple-mounting. It was at one time very popular, but is passing into the background—a passing not to be deplored. The editor of the Guild never advocated this style of mounting, believing that the simpler a picture is finished the more pleasing and artistic its appearance.

O. J. HEATH. — **To Produce Red and Brown Tones on Self-toning Paper** by the use of alum, make up a solution of an ounce of alum dissolved in 20 oz. of water. Place the prints in this solution and keep them moving for five minutes, then transfer to clear water, rinse well and place for one minute in a soda-phosphate bath made of three grains of the phosphate to each ounce of water. Wash again and fix in hypo-bath, using 1 oz. of hypo to 10 of water and adding 1/8 oz. sodium carbonate. Leave in the fixing-bath for eight or ten minutes. For brown tones, add an ounce of salt to the alum-bath and proceed as for red tones except that the print is left longer in the fixing-bath until the required tone is reached.

A. L. W. — **The reason why your Silver Nitrate Turned Black** — which means that it has oxidized — is because you did not take the precaution to keep the bottle containing it from the light, nor was it probably corked tightly enough. The bottle should be wrapped in black needle-paper and, if not to be used for some time, melted paraffine wax should be turned over the cork. In its present state it is useless, so you had better throw it away and prepare a fresh solution.

THOMAS D. — No, there is no way to prevent anyone from taking a picture of a landscape which one amateur has been successful enough to discover and make from the scene an exhibition picture which has won a medal. The picture itself can be copyrighted, but you cannot copyright the "view."

M. M. H. — A solution which will make **Soap Bubbles** of long enough staying-qualities to be photographed may be made as follows: 1 oz. pure resin and 1 oz. potassium carbonate boiled in 10 oz. of water till a thick solution is made. This is diluted with three or four times its quantity of water, and used in the ordinary manner to make bubbles, the difference being that these bubbles remain some time without breaking. To facilitate the making of the pictures, the camera should be all ready for the picture before blowing the bubble and the bubble itself should be dropped on the table or stand at the point where the focus is the sharpest. Some very interesting pictures may be made of bubbles and the photographs used for decorative purposes.

C. L. MILLER. — **Your Over-exposed Plates** may be turned into good-printing negatives by using a reducer which can be bought ready prepared or you may mix a solution yourself. Formulae have been given often in this department as well as full directions for reducing dense negatives. If the contrasts are too strong, use ammonium persulphate, 15 grains to each ounce of water. When sufficiently reduced place at once in a 5% solution of sodium sulphite to stop the action of the reducer. To reduce the plate evenly, make up a 10% solution of potassium ferricyanide, then add a few drops at a time to a hypo bath made of hypo, 1/2 oz., water, 5 oz.; using just enough of the ferricyanide solution to tinge the hypo slightly yellow. This works rather quickly and the reduction should be carefully watched to prevent its going too far. Possibly you would have better results with a commercial reducer.

B. M. — **The Dark Streak on your Negative** is doubtless caused by a ray of light's striking the plate at

some time before development. A ray of light striking the lens will produce a dark streak as will also a ray of light striking the plate when placing it in the camera, taking it out, or transferring it to the developer. Such a streak would come under the head of local fog and should be treated accordingly. Sometimes such defects may be removed by taking a piece of clean chamois, drawing it tightly over the end of the finger, dipping it in alcohol, and rubbing the place gently. If the film becomes softened before the spot is removed, dry the plate and then continue the process.

LOIS BROWNE. — **There is No Limit to the Number of Prints** which you may send to the contests conducted by the Guild, but the wiser plan is to send only two or three very good ones, making the print as good as you can and then mounting it in an artistic manner. A great deal depends on the attractive way in which a print is finished when reckoning up its points.

DAVID T. — **Distilled Water** is water which has been converted into steam and then changed again to liquid form by cooling. Distillation removes impurities from the water. Druggists use it to prepare solutions in which water is an ingredient. You do not need distilled water for your photographic solutions. If the water has impurities in it, boil it in an earthenware crock, cool, and filter it through two thicknesses of filter-paper and it will be pure enough for all photographic purposes.

Counting for Photographers

IN one or more of his many varieties we all know the gentleman in the last train. I mean the one who has been kept late at the office, where he is apparently engaged in some occupation that demands the formality of a dress suit and the possession of a dinner menu. He is generally of a dogmatic and argumentative turn of mind, and does not wait for a preliminary introduction before addressing reluctant strangers.

I happened upon one recently who absolutely dragged a retiring fellow passenger into an argument on the speed of the train — such as it was. This led to the question of the mental timing of a given number of seconds, and the retiring gentleman was coerced into trying to time ten seconds against the loud man's watch. It was a poor try. Whereupon the loud man aggressively announced to all whom it did or did not concern that he would forfeit half a crown to any man breathing who could mentally time one minute. Considering myself included in the category I meekly asked what he thought a fair limit of accuracy. He generously named five seconds one way or the other, and ostentatiously lugged out his watch and a half-crown. I humbly announced my willingness to have a shot for the coin, and amidst the suppressed excitement of the whole carriage-full I was started on the tick. I called "time" exactly on the sixtieth second, amidst the loud plaudits of all but the man with the half-crown — or rather without it. It was a very good half-crown and easily earned.

I guess the loud man had had no experience of photographers, or he would have known how easy many of them find it to count seconds with the accuracy of a stop-watch. I often mentally time periods of four or five minutes practically dead true; and not only that, but while I am doing it I can sort out negatives, kill gnats, fill and light a pipe, rescue the canary from the maw of the cat, or do any other odd job that happens to be around. Some photographers can time the single minutes accurately, but lose count of the actual number of minutes reckoned. I would advise such to keep a packet of pins at hand, and jab one into their leg for each finished minute. They can then readily ascertain the number of minutes by counting the pins. Nothing easier. — *The Walrus, in Photography.*

Exposure-Guide for December

EXPOSURE for average landscapes with light foreground; river-scenes; figure-studies in the open, light-colored buildings and monuments; wet street-scenes; snow-scenes with dark objects, with stop $F/8$ (u. s. 4), on Class 1 plates in **bright sunlight** (intense shadows).

12 M.	11 A.M. and 1 P.M.	10 A.M. and 2 P.M.	9 A.M. and 3 P.M.	8 A.M. and 4 P.M.	7 A.M. and 5 P.M.	6 A.M. and 6 P.M.	5 A.M. and 7 P.M.
1/32	1/32	1/24	1/12	1/6			

LIGHT. **Cloudy-bright** (faint shadows), double; **cloudy** (no shadows), four times; **dull**, eight times; **very dull**, sixteen times the exposures for bright sunlight.

STOP. For other stops, multiply by the factors in heavy-face type. $F/4$ (u. s. 1) **1/4**; $F/5.6$ (u. s. 2) **1/2**; $F/6.3$ (u. s. 2.4) **5/8**; $F/7$ (u. s. 3) **3/4**; $F/11$ (u. s. 8) **2**; $F/16$ (u. s. 16) **4**.

SUBJECT. For other subjects, multiply by the number at the head of each class. **1/8.** Sky and white clouds. **1/4.** Sea and sky; distant landscapes without foreground. **1/2.** Open landscapes without foreground; open beach; ships and yachts; purely snow-scenes; white or black-and-white objects. **2.** Landscapes with medium foreground, or in fog or mist; buildings; well-lighted street-scenes. **4.** Landscapes with heavy foreground; ships in dock; groups in the shade. **8.** Portraits in the shade. **16.** Badly-lighted river-banks, ravines, glades, and under trees. **32.** Wood-interiors. **48.** Average indoor portraits in light-colored room, near window, with reflector.

PLATE. The numbers represent the relative speeds. Thus, Class $11/4$ requires one-fourth more exposure than Class 1.

Class 1/3. Lumière Sigma. **Class 1/2.** Barnet Super-Speed Ortho., Ilford Monarch, Seed Gilt Edge 30. **Class 3/4.** Barnet Red Seal, Defender Vulcan, Ilford Zenith, Imperial Flashlight, Eastman Speed-Film, Seed Color-Value, Wellington Anti-Screen and 'Xtra Speedy. **Class 1.** American; Ansco Film; Barnet Extra Rapid, E. R. Ortho. and Studio; Cramer Crown; Defender Ortho. and N.-H. Ortho., Defender Vulcan Film; Ensign Film; Hammer Special Extra Fast; Imperial Special Sensitive, Orthochrome Non-Filter and Ortho. S.S.; Kodak N.-C. Film and Kodoid Plates; Lumière Film and Blue Label; Premo Film-Pack; Seed Gilt Edge 27; Standard Imperial Portrait and Polychrome; Stanley 50; Wellington Speedy and Iso. Speedy. **Class 1 1/4.** Cramer Banner X. Instantaneous Iso., Portrait Isonon and Spectrum; Hammer Extra Fast, E. F. Ortho., Non-Halation and N.-H. Ortho.; Seed 26 X, C. Ortho., L. Ortho., Non-Halation and N.-H. Ortho.; Standard Extra and Orthonon. **Class 1 1/2.** Cramer Anchor, Lumière Ortho. A and B. **Class 2.** Cramer Medium Iso., Ilford Rapid Chromatic and Special Rapid; Imperial Special Rapid; Lumière Panchromatic C. **Class 2 1/2.** Barnet Medium and Ortho. Med.; Hammer Fast; Seed 23. **Class 4.** Cramer Trichromatic; Ilford Chromatic and Empress; Stanley Commercial. **Class 5.** Cramer Commercial Isonon; Hammer Slow and Slow Ortho.; Wellington Ortho. Process. **Class 8.** Cramer Slow Iso.; Ilford Ordinary. **Class 12.** Cramer Contrast; Ilford Half-tone; Seed Process. **Class 100.** Dufay Diophtichrome; Lumière Autochrome.

THE CRUCIBLE

A MONTHLY DIGEST OF FACTS FOR PRACTICAL WORKERS

With Reviews of Foreign Progress and Investigation

Conducted by MALCOLM DEAN MILLER, A.B., M.D.

Readers are encouraged to contribute their favorite methods for publication in this department

Address all such communications to The Crucible, PHOTO-ERA, 383 Boylston Street, Boston

The Results of Some Shutter-Tests

IN *The British Journal of Photography* Mr. T. Smith publishes the results of tests of shutters conducted at the National Physical Laboratory at Kew, England. The author's preliminary definitions are:—First; "We define the speed of a between-lens shutter" which opens and closes at the center "to be the interval of time between the instant when light first passes the shutter-leaves and the instant when all light is cut off: in other words, by speed in this connection we mean the total duration of exposure at the center of the plate": Second; "In the case of the focal-plane shutter, the speed is defined as the interval of time taken by the opening between the blinds to cross the axis of the lens. This is a measure of the amount of light which will reach the center of the plate during the exposure": Third; "The equivalent exposure is the length of time required to transmit to the plate an amount of light equal to that received during the actual exposure, when throughout this (equivalent) exposure we suppose that every part of the lens is effective which is effective at any instant of the actual exposure."

"The exposures in all shutters are connected with the efficiency by the equation—Equivalent exposure = Total duration of exposure x Efficiency.

"From this it is evident that the 'speeds' of focal-plane and between-lens shutters are not directly comparable. A case which may easily arise is one in which a focal-plane shutter and a between-lens shutter for a particular lens-aperture have an efficiency of 0.5; the 'speed' of the focal-plane shutter may be 0.001 sec., and of the between-lens shutter may be 0.002 sec. In these circumstances the two shutters are equivalent to one another; in each case the length of time during which light reaches the center of the plate would be 0.002 sec., and the equivalent exposure would be 0.001 sec."

Mr. Smith tested ten focal-plane shutters, only two of which were of the same design, and found the following maximum speeds: "the highest was 0.0005 sec. and the lowest 0.006; the mean of all the highest speeds was 0.0025 sec., four of the ten having their highest speeds lower than this. Only two shutters attained as high a speed as 0.001 sec.

"In the best case the highest speed was within 3 per cent of its nominal value; in the worst case it was three times as long as it should have been—an error of 200 per cent—taking the marked speed as the basis of measurement."

Again, "the mean error of all marked speeds of all shutters was 43 per cent."

In the study of between-lens shutters, the smaller sizes, suitable for 4 x 5 lenses, were chosen. Twenty of these gave the following results:

"The highest speed (duration of exposure) reached by any of these shutters was 0.0023 sec.; the highest speeds attained by all the shutters were between this and 0.022 sec.; the mean of all the highest speeds was 0.0054 sec.

In the best case the highest speed was within 0 per cent of its nominal value; in the worst case it was 2.2 times its nominal value. The mean error for all the speeds was in the best case 15 per cent, in the worst case 80 per cent, and the mean error for all the shutters was 46 per cent. The longest exposures were between 0.17 sec. and 2.3 sec., with a mean value of 1.0 sec. The ratio of the lowest speed to the highest varied from 7.5 to 1,000, with a mean value of 500.

"In some of these cases the efficiency was determined. In the best case, with a highest speed of 0.005 sec., the efficiency was 54 per cent; the efficiency with the lowest speed (0.84 sec.) was 100 per cent, and the mean value for all speeds (average value 0.22 sec.) was 89 per cent. The mean results for all efficiency-tests were: highest (mean 0.0054 sec.) 50 per cent; lowest (mean 1.0 sec.) 100 per cent; average (mean 0.22 sec.) 80 per cent.

"To improve the [focal-plane] shutters at high speeds we have to increase the spring-tension or reduce the separation between the blind and [the] plate. The latter probably cannot be made less than 1/4 in., but by using metal at the back of the camera and for the dark-slides [plate-holders] it should be possible to do this."

The following table of comparisons is also given:

COMPARISON OF FOCAL PLANE AND BETWEEN-LENS SHUTTERS USED WITH LENS WORKING AT APERTURE $f/4$

SHUTTERS GIVING HIGHEST SPEEDS		Focal-plane	Between-lens
At highest speed	Total duration of exposure .....	.0017	.0023
	Equivalent exposure .....	.0005	.0011
	Efficiency .....	.30	.47
	Ratio of equivalent exposures—longest / shortest	60	1,900
MOST ACCURATELY MARKED SHUTTERS			
At highest speed	Total duration of exposure .....	.0024	.005
	Equivalent exposure .....	.0006	.0027
	Efficiency .....	.25	.54
At lowest speed	Total duration of exposure .....	.072	.84
	Equivalent exposure .....	.071	.84
	Efficiency .....	.30	1.00
	Percentage error of markings	14	15
	Ratio of equivalent exposures—longest / shortest	120	300
MEAN RESULTS ON ALL SHUTTERS			
At highest speed	Total duration of exposure .....	.005	.0054
	Equivalent exposure .....	.0025	.0027
At lowest speed	Total duration of exposure .....	.5	.5
	Equivalent exposure .....	.056	1.0
	Efficiency .....	.056	1.0
	Percentage error of markings	1.0	1.0
	Ratio of equivalent exposures—longest / shortest	43	46
		33	500

"The most remarkable difference shown by this comparison is in the range of exposures obtainable, as measured by the ratio of the longest equivalent exposure to the shortest equivalent exposure. The between-lens shutter is in this respect out of comparison superior to the focal-plane shutter."

BERLIN LETTER

MAX A. R. BRÜNNER

It is natural that every amateur tries to lessen the weight of his photographic equipment as much as possible, particularly when he is traveling. Of course we have films, but there are many people who object to them. Usually the metal plate-holder is employed, at least for small sizes, occasionally the wooden holder. A third form is now being adopted in Germany, viz., the paper holder, made by a large Dresden firm. In volume and extension it resembles other types, but its weight is considerably less, and is almost negligible, as it consists, as the name implies, of black, rather thin, yet very tough paper, and is absolutely safe to light.

One might expect that such a fragile article would not last long, say half-a-dozen exposures. In reality, with sufficient care, this new type of holder lasts for a number of years. Small damages can be easily repaired by the user. The writer tried them himself and has not noticed any fogging of the plate. I put the plates in four to six weeks before the day of exposure and yet they were not affected. It is of course essential that they be perfectly dry, and storing in a moist place must be strictly avoided. The price is surprisingly low, as a dozen 9 x 12 cm. [3 3/4 x 4 3/4] holders cost one dollar: thus we are enabled to purchase at small expense, say, two dozen and make twenty-four exposures on glass plates without refilling the holders. Amateurs who have made tours in the mountains and similar places will know the many difficulties in changing plates in a primitive hotel or cottage. But even during small trips this saving in weight and space will be welcomed by everybody. As regards the latter, I may say that four paper holders put one upon the other make up the thickness of one wooden double holder. Therefore a parcel of twelve paper holders takes up no more room than one of three wooden double holders. The weight of the latter (9 x 12 cm. size) is about one hundred and fifty-five grams [about six ounces], that of the paper model only twenty-one grams [less than an ounce], consequently twelve paper holders weigh half as much as three wooden ones. As regards metal plate-holders generally, one weighs ninety-eight gm. [three and one-third ounces] or twelve eleven hundred and seventy gm. [forty-two ounces] (always 9 x 12 cm.); but the weight of the twelve paper holders is two hundred and fifty-two gm. [nine ounces] or nine hundred and eighteen gm. less. In each case the saving in weight and space is quite remarkable. It must, however, be added that an adapter is necessary for employing these novel holders. Its price is, for 9 x 12 plates, 13 or 14 marks [\$3.35]. This is an expense incurred but once. There is only a small addition of weight, but, on the other hand, the regular focusing-screen becomes superfluous, as the adapter is fitted with one which need not be removed when making the exposure, as it is pressed back after having been put into the paper holder. Taking off the weight of the screen-glass there is an addition of one hundred gm. to the outfit, so that the above saving of nine hundred and eighteen gm. is reduced to eight hundred and eighteen gm., another feature recommending the use of these novel expedients. The holders are made also to be used for flat films.

In one of my letters I spoke of the wonderful development of motion-picture photography. With the latter the same conditions now exist as thirty years ago with photography generally. The practical employment lies

in the hands of business men who were formerly of a profession having no connection with photography and who contribute but little to the technical and artistic perfection of this new art. If there were no competition, they would not listen to inventors and designers. If photography had remained, three decades ago, a monopoly of the professionals, and if the urging and reviving element of the amateurs had not come into existence, we would still use some old-fashioned process. We must consider such questions, if we wish to discuss whether it will be advantageous to cinematography if amateurs mix in the business. Certainly there would be a considerable demand for films, for the amateur would not only reproduce the pictures, but would take the pictures himself. Perhaps the increased consumption would lead to a cheapening of the films. It is due to the present high cost that so few amateurs have taken up cinematography. It may be also that intelligent people would invent a cheaper material than the costly celluloid film. Still more important than this business-side is the aesthetic one through the influence of the amateur, and here we have the same case as with photography generally. However, on account of the peculiar nature of a motion-picture, the situation is somewhat different, for here correct representation of movement is the main condition, and artistic arrangement of the scene, correct lighting, etc., are of secondary importance. Yet it will be useful if somebody takes up the lead and creates some notable examples. The picture-factories wish only to do a good business, and the more sensational a scene is, the more it pays. But there are many who object to these unnatural scenes, offending our eyes and minds. Certainly the amateurs could do much good, and there will be thousands who prefer to see films with artistic reality and life, to the theatrical and highly-colored scenes at present offered.

Every amateur makes so-called genre-scenes. Why should these be not possible for the cinematographic camera? Also to snap popular customs, dances, military parades, festivals, sporting in all its phases, ways of traveling by rail or by ship, and what not, all this is accessible to the amateur. But, contrary to the practice of the film-factories, such scenes should not be made to order and by actors or other paid persons, but taken from real life and unexpectedly. If one has a passion, say for animals, fishes, or insects, one finds still more motives. But in another direction this proposition is well worth attention. The films thus obtained should not only be sold to theater-managers, but be presented in the family, before clubs, at socials, private festivals, etc. We are in a position to choose our own subject and employ our own taste. We may instruct our children by such films taken from real life, particularly during a trip abroad, which gives the other members of our family and guests the very best chance to see what we have seen during our tour, far better than a long description and pictorial postcards or souvenir-albums. Of course the apparatus and the films are rather expensive, and this is the only reason why the idea has not been carried out to a large extent. Germany's largest firm in the photographic business has recently turned out an apparatus especially made for the amateur which can be used as well to take the views as to reproduce them. In large families a spacious room should be reserved for that purpose, and this could be tastefully decorated to serve as a permanent demonstrating-room. The apparatus should be so arranged that we are also able to feed them with films purchased or hired. We may in addition combine them with a phonograph, and thus have our theater and concert in our own house [a state of things which will make it quite easy to entertain family and friends.]

BOOK-REVIEWS

Books reviewed in this magazine, or any others our readers may desire, will be furnished by us at the lowest market-prices.

THE ART OF THE VIENNA GALLERIES. By David C. Preyer. Profusely illustrated. Price, \$2.00 net. Boston: L. C. Page and Company.

Unlike other European capitals, Vienna does not keep her art-treasures under one roof. They are assembled in the Imperial Art Museum (principally), the Gallery of the Imperial Academy, and in the private galleries of the Prince von Liechtenstein, Count Czernin, Count von Harrach and Count Schönborn-Buchheim. These collections together constitute a formidable array of paintings from every school, and should be visited by the serious art-student and the picture-lover; for while certain great masters may be studied better elsewhere, others are seen more advantageously in Vienna. This is true of Dutch and Flemish masters. The portrait of Rembrandt's aged mother hangs in the Imperial Museum. Here also may be seen indubitable masterpieces of Raphael, Titian, Palma il Vecchio, Parmigianino, Velasquez, Murillo, Rubens, Holbein and Dürer.

The Liechtenstein Gallery boasts of Van Dyck's magnificent portrait of Maria Luisa van Tassis, Frans Hals' bombastic full-length portrait of Willem van Huythuyssen and priceless gems by Botticelli, Caravaggio and other great men of the Italian school. The great self-portrait of Rembrandt, in which one observes traces of the economic struggles through which that great genius passed, adorns this collection. Mr. Preyer refers to it as follows: "It is one of the famous works of the artist's first period, painted in 1635. The frank and generous execution, the soft, warm light, the sober color, the transparent shadows, are all in exquisite harmony."

The author gives the history of each collection, with its many vicissitudes and fortunes, and brightens his description of prominent pictures with anecdote and story, making the volume a most alluring and a well-nigh indispensable preparation for a visit to the illuminating Vienna Art-Galleries.

BEGINNINGS OF RHETORIC AND COMPOSITION. Including Practical Exercises in English. By Adams Sherman Hill, 5 1/2 x 7 5/8 x 7/8 inches, 560 pp., with copious index, cloth, \$1.00. New York: American Book Company.

In a recent issue of the *London Contemporary Review*, Mr. J. E. G. de Montmorency calls attention to the abuse of the English language by press-writers and criticizes current usage as follows: "Does the press, in its leading and its special articles, and by means of its enormous organization, exercise the deliberate influence for the literary good of the language that the English-speaking race has the right to expect? In the case of certain editors and certain very well-known journalists, there can be no doubt that a deliberate effort is made to prevent the fouling of the well which is now taking place. But this is not true of the press generally, and it is not true of the press as an organized institution. The reckless use of adjectives in leading articles, in descriptive articles, as well as in the newspaper bills, is a disgrace to a literary people. The abuse of the adjective by the entire press; the absence of responsibility as to the meaning of words; the looseness of construction in sentences; the entire neglect of English as a means of conveying exact ideas, are a disgrace to our press. More-

over, the worst offenders are in London. The provincial newspapers have often a sense of literature that is totally absent from a large portion of the London press. The reason is clearly not the pressure of time. It is true that leading articles are often written in haste but, perhaps for this reason, they are often written in good, terse English. The offenders write themselves down in turgid special articles, that display the mind of a barnyard cock."

Any editor in this country will admit that this criticism applies quite well to conditions in America. The situation is such as to alarm all educators and people who love their mother-tongue. Conversational slips occur so frequently in print that it has long seemed desirable to the Editor to call the attention of readers of PHOTO-ERA to the late Professor Hill's book. We are convinced that no more authoritative and at the same time more readable work is available. Although it is laid out for pedagogical purposes, it is entirely suited for home-study; and anyone who is in doubt on questions of usage, or even of taste, will find it invaluable as a reference-book. Professor Hill's dicta are generally regarded as dependable — in fact, his criteria for the definition of "good use" have been adopted by most teachers throughout the country. We think that this is a book which should be owned and read by everyone who cares to be able to make his conversation or his writings express an exact meaning in correct form.

THE SPELL OF HOLLAND. By Burton E. Stevenson, with illustrations from photography by the author, and map showing author's route. Price, \$2.50. Boston: L. C. Page and Company.

Of the countless number of American tourists who have visited Holland, there are many who, carried away with enthusiasm, have attempted to convey to their countrymen impressions of this fascinating country. Few have succeeded. The reason is that most travelers are satisfied with one day's stay each at three or four of the principal cities, and then profess to know Holland! Popular magazines and newspapers show poor judgment when they publish such contributions, most of which contain inaccurate information, except that which is copied directly from reliable guide-books. In this case, however, the author in company with his wife toured Holland systematically, stopping at the principal points, and also at many interesting places omitted from the usual itinerary. Mr. Stevenson performed his task intelligently and thoroughly, the result being a narrative of uncommon interest, brightness and accuracy. His Holland is not merely a country of wind-mills and canals, but one of an energetic, resourceful and patriotic people, whose industries, in many cases, exemplify the highest standard of excellence to be found anywhere on the globe. In civilization, commerce, learning, politics and art, the Dutch have shown themselves the equal of any nation. Their country offers unique visual delights to the tourists, which fact Mr. Stevenson has presented in a manner at once lucid and charming. He has succeeded most admirably in explaining the irresistible spell which Holland exerts upon the receptive mind. The volume is another of those exemplary travel-books which are a credit to the enterprising publishing firm of L. C. Page and Company.

TORONTO, CANADA, March 8, 1911.

DEAR SIR:—"I am very much pleased indeed with your number for March. It is full of splendid things and is well worth much more than the magazine costs.

Yours sincerely,
"A. C. CREWS."



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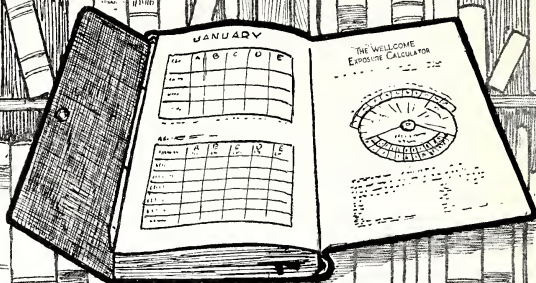
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OUR ILLUSTRATIONS

Edited by WILFRED A. FRENCH

THE front cover this month depicts a scene not uncommon at Christmas Eve. The idea has been well expressed by Katherine Bingham, the versatile photographer of St. Johnsbury, Vt. No data.

Rudolf Eickemeyer's interesting study of a child's head is typical of the artist's natural, unfettered mode of expression. He uses an uncorrected lens of his own adaptation, both for portraiture and landscape. Platinum print. No other data.

Dr. Nathan Beer's pictures, pages 276-281, reveal the strong grasp of an able worker. They are worthy of an extended analysis, prevented only by lack of space. The portrait of Rev. Dr. G., page 281, is particularly welcome in these pages, for it is an admirable example of front lighting, as eminently characteristic of advanced portraiture of which the father is the late lamented James Inglis. Data: Dec. 7, 1910; 11 A.M.; 8 x 10 Century Studio Camera; 13-inch Cooke lens; series IV; F/5.6; used at F/5.6; flashlight, Seed 26X; pyro-soda; Grade E, Artura print 7 x 9. Flower-study, p. 276, same as preceding; lighted by Tungsten lamp; 20 seconds. Portrait of Mrs. L., page 279, the same; flash—Aga Blitzlicht powder and umbrella.

The portrait by Lifshay, page 279, is masterly in composition and expression. One is thankful that the sitter's clothes are not lost in obscurity or merged with the background—a matter so often neglected by other professional photographers even of high standing. Data: November, 3 P.M.; Studio daylight; 8 x 10 Century Camera; Cooke lens; stop F/5.6; 13-inch focus; Seed 27; 2 seconds; hydro-metol; platinum print.

The rare pictorial qualities of Maude Wilson's work, pages 284-89, fully justifies Sidney Allen's eulogy in this issue. No data.

Wilhelm Kübler, the eminent photographer of Darmstadt, departs from the conventional in portraying his sitters, particularly when they are persons of note. Thus, he does not place Karl Hepp, the able dramatic writer, in a chair and arrange a pose. An attitude like the one shown on page 290 is rather distinctive; in any event, it yields a good likeness. The idea is not new, but appeals to the progressive and resourceful artist.

The picture on page 293 shows that, in the hands of a sympathetic artist, the camera can interpret themes of a lofty, emotional character, as explained in this issue. Unable to obtain the name of the artist.

The amusements of the little ones furnish a large variety of camera-subjects. Only a worker of suitable temperament, like William S. Ritch, can hope to do them justice. No data.

Mr. Weston's interiors, pp. 299-300, excel by their harmonious chemical effect. The gradations are well preserved and all tendency to harshness has been carefully avoided. There is, withal, a clearness and refinement of workmanship that is delightful to see. Data: An Artistic Corner—6 1/2 x 8 1/2 Seneca Camera; back combination of Voigtlaender & Son's Collinear, Series II, focus 15 inches; stop F/22; August, 4 P.M.; light subdued; room with five windows; 1 hour; Ortho-ton; pyro-soda; tank-developed; Cyko print. An Artistic Interior—same camera; Voigtlaender & Son's Collinear, Series II, 7 7/8-inch focus; stop F/22; August, 3 P.M.; very bright sun; room had five windows; 1/2 hour; other details the same.

Our Monthly Competition

CONSPICUOUS among the pleasant surprises afforded our readers this year, now drawing to its close, is the artistic ability of a new worker—Dr. D. J. Ruzicka, of New York. Rarely has an amateur of so brief a practical experience (two years) shown such strong executive ability and keen appreciation of art-principles as Dr. Ruzicka. His illustrated paper on the pictorial attractions of Central Park, published in the October PHOTO-ERA, has gained him many admirers, who will be pleased to learn that he captured the first prize in the "Wood-Interiors" competition. The picture, page 304, bears the stamp of his forceful individuality. The theme is original and pleasing and the treatment modern and vigorous. The eye is led up spontaneously to the chief point of interest. The main light is perfectly placed and leads one into the heart of the woods. The atmosphere, so difficult to get, is delightful, and it is due largely to correct exposure. Data: August, 3:30 P.M.; 5 x 7 Korona Camera; 9-inch Smith lens; used at F/8; 3 times ray-filter; 3 seconds; Isonon plate; Rodinal 1 to 80; 5 x 7 American Platinum print toned with mercuric chloride.

In Mr. Dove's picture, page 305, the eye is gently directed along a path of alluring beauty to the main light. The whole scene is one of unusual charm. Data: May, 5 P.M.; sun; 1/2 sec.; Ideal ray-filter; R. R. lens; U. S. 4; 7 1/2-inch focus; Orthonon; Carbon print.

The sturdy tree-trunk in Mr. Bridge's picture, page 307, forms a strong accent, but does not bar the way to the rear portion of the woods. It is a well-balanced arrangement and broadly treated. Data: 3 1/4 x 4 1/4 Pocket Premo; 5 1/2-inch Planatograph lens; stop F/8; August, 11:30 A.M.; rainy, dull light; 5 seconds; Inst. Iso; M. Q.; P. M. C. Rough Bromide enlargement.

Quarterly Contest for Beginners

THE latest contest in this class affords much pleasure. The first two prizes are proof of this. For a beginner, Mr. Garvin displays an intimate knowledge of the truly pictorial, page 306.

We have before us a well-ordered composition, and of which no advanced worker need be ashamed. The articulation is clear but mellow; the foreground has been managed with excellent judgment; and a feeling of restful harmony pervades the entire picture. Data: Aug., 2:30 P.M.; B. & L. Zeiss Protar, Series VIIa; 5 5/8-inch focus; stop F/8; film pack; light clouds; 1/25 sec.

R. Muns, the author of "The Brook," page 309, probably felt the joy of a sharply-focused picture, but this does not seem to have marred the beauty of the scene, nor the clearness and truth of the perspective. Data: Sept., 12 M.; slightly hazy; Rapid Orthographic lens; 6 1/4-inch focus; stop F/16; 1/10 second; Seed 27 plate; Pyro-tank; Special Velvet Velox.

In spite of its serious defect—cottage out of plumb because the camera was pointed upward—the picture by W. W. Richardson, page 309, has several good points. The view-point was well chosen; the lighting is good, and the plate was correctly exposed and developed, resulting in a fine chemical effect. Architectural subjects are best made with a camera, the focusing of which can be adjusted when the former is directed upwards or downwards; but in either case the uppermost side of the plate or film must be absolutely level.

ON THE GROUND-GLASS

A Desirable Characteristic

THERE is such a thing as the retoucher's art. When the depositor of graphite, in his attempt to beautify or rejuvenate the human countenance, destroys every vestige of character and expression, the process is perverted, degraded. The removal, with the aid of a retouching pencil, of the hollow at the base of the throat—the supra-sternal notch—is as senseless—yes, as reprehensible as the wanton elimination of the dimples in the cheeks, or the *fossette* or *Grübchen* in the chin. Instead of being carefully preserved by the retoucher, this pretty, fascinating little depression is ruthlessly effaced; indeed, it is often so ordered by the sitters themselves, who do not realize that it is a beauty-spot. In extolling the extraordinary beauty of "Mona Lisa," the critics never omit to refer with delight to the hollow of the throat, which Da Vinci recorded with appreciative ardor.

Portraits of William Cullen Bryant

WE are glad that an opportunity is now afforded visitors to the American metropolis to become familiar with the face and figure of William Cullen Bryant through an admirable portrait-statue recently unveiled there. Less fortunate are the people of the Bay State, who, until recently, observed with disgust a huge and shockingly-crude poster of the poet, used in connection with an advertisement of a very cheap cigar and displayed on the billboards throughout Massachusetts.

Some of our readers may have seen or even possess a profile portrait of the poet, made by Altman, of New York, during the early seventies. It is still considered the best portrait made by photography of the author of "Thanatopsis." The picture certainly is regarded, even to-day, as a masterpiece of individual characterization and a credit to wet-plate photography.

The Charm of Pictures

WHILE music hath charms that soothe, a beautiful picture has charms that often create a desire for possession, hence the disappearance of Mona Lisa and many other valuable pictures. In the category of pictures should be included photographs; and many a pictorialist mourns the loss of a favorite print exhibited as a part of a collection in some camera club or at a photographers' convention. It has been conjectured—and very reasonably, too—that, in the case of a photographic print, the abstractor desires it for study and emulation; for to display it on his walls, or even to sell it, would be a hazardous proceeding.

Mr. W. H. Phillips, whose large and interesting collection of Spanish subjects has been shown at camera clubs and museums throughout the country, reports the loss of his "Castle in Spain." Fortunately, the camera club where the collection was shown last offered restitution, but Mr. Phillips declined to accept it, regarding the loss of the print as one of the fortunes of war.

In this connection it may be interesting to know that this collection is now in Toledo, Ohio, and will be used by the camera club in an exhibit on the occasion of the opening of the new art-museum.

Honesty and Ethics

ARE our readers aware to what extent photographic apparatus is being stolen and sold? They will be astonished to learn that, during the year now drawing to a

close, about \$20,000 worth of cameras, lenses and binoculars have been taken from dealers in photographic supplies, surreptitiously and otherwise, and disposed of to pawnbrokers and unscrupulous second-hand dealers, who, in turn, sell them to the consumer. The attitude of PHOTO-ERA on this subject is very well known. It has written strongly on the ethics of handling photographic goods purchased from unknown persons and under conditions open to well-grounded suspicion. Intending purchasers of lenses or cameras, in patronizing only regular dealers in good standing, will do much to impede a traffic which incites many people to crime.

W. M. Snell

THE lens-department of the Robey-French Co., Boston, Mass., has been strengthened by the recent addition of Mr. W. M. Snell, well known as an expert photographer and optician. His long and thorough experience in these branches will enable him to render valuable service to his firm. Being a thoroughly wide-awake, progressive and practical young man, Mr. Snell has familiarized himself with cameras, lenses and general photographic apparatus of both American and foreign manufacture. In addition to all this, Mr. Snell has an engaging and convincing personality, so that he cannot help make many firm friends in his new and responsible position. We wish him success.

Catalog-English

THAT a working-knowledge of English is not to be despised even in ordinary business, is shown by the fact that an American camera-manufacturing firm created a humorous blunder in describing one of its new pieces of apparatus. The clerk entrusted with the work of getting up a descriptive price-list probably had not read the advertisement of a piano-forte for sale by a lady with carved legs. So the camera-firm advertises a "convertible lens, made of solid mahogany, ebonyized finish." The eagle-eyed "Walrus" in an English coterminary commented upon this bit of careless English as follows:—"Now such a lens is certainly exceptional, and, although there is no definite information as to what the lens can be converted into, it is probably worth a lot of money, as it is not only solid mahogany, but ebonyized into the bargain. I doubt whether it would transmit enough light for high-speed work, but that is a minor matter, if it can readily be converted into a billiard-table, a chopping-block, or a Yule-log." Perhaps the catalog-man who wrote the advertisement may have had a head of solid mahogany.

A New Camera-Subject in Holland

WITHIN a short time Amsterdam will possess a new attraction to lovers of art. The house where Rembrandt lived from 1639-58, and where he passed the most happy years of his married life with Saskia, is being restored and arranged as a small Rembrandt museum. The historical building, long much neglected, became the property some time ago of a society, and is now being restored under the direction of a famous architect.

It Would Not Be Safe

SUITOR.—"I would like to see the photo of the lady with the \$500,000 dowry."

MATRIMONIAL AGENT.—"We don't show photos with the large dowries."—*Fliegende Blaetter*.

NOTES AND NEWS

Announcements and Reports of Club and Association Meetings, Exhibitions and Conventions are solicited for publication

The Eighth American Salon

C. C. TAYLOR, secretary of the American Federation of Photographic Societies, writes to us as follows: The Eighth American Salon will consist of 96 frames. The jury was composed of F. C. Gottwald, Cleveland School of Art; Helen J. Niles, painter, pupil of Henri; John Chislett, Charles L. Lewis and Mrs. G. W. Stevens. Four clubs will be listed in the section of the prospectus devoted to groups of pictorial workers. The conditions were that ten or more frames by at least three members should be accepted, the jury being, of course, ignorant of the makers' names. The pictures were hung without distinguishing marks and the jury took three days to make its selection. The clubs honored were: The Boston Photo-Club; The Brooklyn Institute of Arts and Sciences, Department of Photography; The Pittsburg Camera Club, and the Toledo Camera Club.

The Salon will probably open during November in The Brooklyn Institute of Arts and Sciences. Future bookings will be announced in PHOTO-ERA as soon as arrangements are completed. It is not improbable that the Salon will visit Boston this year, though suitable dates are hard to arrange.

The Bissell Colleges

THE operating-rooms in Rembrandt Hall are being refinished throughout in a dark shade of olive-green, and the walls are being finished in panels which can be used in place of backgrounds when desired.

Mr. Carl Firey, artist and illustrator for the Orange Judd Publications, is taking a course in engraving at the college and at the same time furnishing the required quota of drawings to his papers. Many of the drawings he engraves himself and sends in the finished cut instead of the drawing. His contract includes the *Orange Judd Farmer*, *American Agriculturist*, *New England Homestead*, *Northwest Farmstead*, *Farm and Home*, and *Dakota Farmer*.

The Blodgett Photo-Machine Co., of Hicksville, Ohio, has just installed a Blodgett Printing-Machine in the college and it is quite popular with the students.

Mr. Herman Schnabelius has returned to resume his course in photography after being absent the past summer. Also, Messrs. Howlett and Earl, who have spent the summer at their homes, have resumed their course in the engraving-college.

Mr. Angel D. Rodriguez, who has taken a course in engraving and three-color work at the college, has left for his home in Panama, where he will take charge of the engraving-department of the *Panadario*, the leading Spanish-English paper in that country.

Mr. Fred Tierney, student of 1908, made a visit to the college last month.

The College Camera Club held its regular election last month and elected the following officers: Mr. Vern Sabin, president; Geo. Morrison, vice-president; F. C. Miller, secretary; and T. Munson, treasurer. The Club has just installed a Shoberg Portable Skylight and it is proving a great success.

Chez Le Photographe

MONSIEUR, les photographies que vous m'avez livrées sont épouvantables; mon mari a l'air d'un singe.

Hélas, madame, je n'y peux rien. Vous auriez dû vous en apercevoir avant de l'épouser.

Wilkes-Barre Annual Exhibition

THE Wilkes-Barre Camera Club announces its eleventh annual exhibition. Entries close Jan. 15, 1912.

The high standard set by this Club makes it one of the most important exhibitions of this country. It has always been so considered by serious workers, for the reason that artists of national fame compose the jury of selection. Entry-blanks will be sent only to those who apply to R. S. Kauffman, Wilkes-Barre, Pa.

Mr. Elmendorf's Lecture on Famous Paintings

DWIGHT L. ELMENDORF's fame as a lecturer was preceded many years by his high reputation as a colorist of lantern-slides. His book on this subject, published about twenty-five years ago, is still regarded as an authority. Mr. Elmendorf's extraordinary skill in coloring glass positives has reached its highest perfection in facsimile reproductions of the masterpieces of the world's great picture-galleries. He states from the platform that these wonderfully-vivid and correctly-colored reproductions are in the form of lantern-slides or Lumière Autochromes, in which latter process Mr. Elmendorf has also achieved distinguished success.

Mr. Elmendorf opened his Boston lecture-season November 16 at the Boston Art Club, the lecture-hall being crowded to the doors, and hundreds of eager picture-lovers were unable to gain admission. The subject of the lecture was "Famous Paintings." The audience was obviously a very critical one, and expressed its approval in enthusiastic terms, although few were prepared for the wonderful fidelity of outline, detail and color of the pictures thrown upon the screen, which illustrated paintings from the galleries of Amsterdam, Haarlem, The Louvre, The Prado, Seville, Berlin and Dresden. As a source of pure enjoyment and education, this particular lecture of Mr. Elmendorf's vainly seeks its peer, and its value in these respects would be hard to overestimate.

Wilkes-Barre Camera Club

At the annual meeting of the Wilkes-Barre Camera Club, the following officers were elected: president, H. C. Shepherd; vice-presidents, Prof. H. C. Petersen and R. S. Kauffman; secretary, Edward Reisser; treasurer, S. H. Gilbert.

An Interesting Frontispiece

AN unusually successful highspeed-photograph, which shows Mr. Erwin E. Smith on a rearing broncho, constitutes the frontispiece of the new Goerz Lens catalog. Mr. Smith, who knows how to fix to the sensitive film the wild pranks of the cowboy on his unruly steed, furnished the prints which illustrate George Pattullo's article on cowboy life in Texas in PHOTO-ERA for June, 1908.

A Notable Book on Photography

MUCH interest has been created among our readers regarding the new work on Photography, by Alfred Watkins, reviewed at length in the November PHOTO-ERA. By an oversight, the price of the book was omitted and, in response to many inquiries, we would say that it is \$2 net, postpaid. We should be glad to fill any orders for this very important book.

Annual Show of the B. Y. M. C. U. Camera Club

THE annual contest and exhibition of the B. Y. M. C. U. Camera Club took place at the club-rooms, 48 Boylston Street, Boston, Mass., November 6-14. The number of entries greatly exceeded last year's contest, viz., 128 prints, and the quality of work was never so high. There were five classes: Portraits, Marine, General, Genre and Landscape, with two prizes in each class. Singularly enough, the club's newest member, Arthur P. Hammond, of Boston, who is well known to readers of PHOTO-ERA as a writer and pictorial contributor of marked ability, captured the first prize in each class, as well as the second prizes in portraits and marines.

The jury had no alternative than to award the prizes strictly upon artistic merit, Mr. Hammond being supreme in this respect, also eminently strong in technique. The second prize in the General class went to F. W. Hill, president of the club, for an impressive study of Boston's passenger transportation activities — a simultaneous operation of railroad, elevated and surface cars, one system above the other, as observed near one of the large terminal stations. In the Genre class the second prize was awarded to M. L. Vincent for an excellent at-home portrait of a lady seated near a window. To C. G. Burbank was given the second prize in the Landscape class for a print of rare pictorial quality and technical merit. It charmed despite the fact that the two boys standing in a pool of water were stiffly posed.

A first and second special prize were offered for the best general exhibit by any one member outside of the prize-winners, and to be determined by a vote of the club. This result was as follows: First prize, F. W. Hill, a package of 11 x 14 Wellington Bromide Paper, presented by Ralph Harris & Company; second prize, M. L. Vincent, one gross Argo Developing-Paper, presented by R. L. Emnis, of the Defender Photo-Paper Company.

An Important Anniversary

IS the general development of civilization, with its manifold interests, twenty-five years is merely a day; but in the progress of invention and the industries arising therefrom, it is sometimes an age. This thought is appropriate in connection with the twenty-fifth anniversary of the famous optical manufacturing firm, THE OPTISCHE ANSTALT C. P. GOERZ, AKTIENGESELLSCHAFT. The development of optical apparatus, from the days of the half-corrected window-glass lens to the modern anastigmat, and from the old ponderous field-telescope to the modern binocular, has been no less important, even though less sensational, than the sudden advancement in methods of lighting, telegraphy and transportation. In this remarkable course of invention, the name GOERZ has become to the scientist, to the Army Officer, and to the photographer, so to speak, a household-word.

The firm of C. P. Goerz was founded in 1886, and two years later it occupied a factory on a small scale in Berlin. The first objectives made by the company were of the applanatic type, under the trade name, Lynkeioskop; and the first lenses which they put upon the market was the Lynkeioskop C/2. These lenses were so well received that Mr. Goerz decided early in 1889 to enlarge his factory, and for this purpose he removed to Schöneberg, a suburb of Berlin. In the years 1890 and '91 the plant was still further enlarged, and in addition to photographic lenses the firm undertook the manufacture of Galilean binoculars. In 1892 and '93 the double-anastigmat type of lens was introduced with the firm of C. P. Goerz taking the lead.

The double-anastigmat "DAGOR" marked a new epoch in photographic optics, and to the firm of C. P. Goerz belongs the credit of having introduced the first symmet-

rical lens fully corrected for astigmatism, a lens which holds, to-day, a pre-eminent position as a universal photographic objective.

In the manufacture of cameras, the firm of C. P. Goerz also stands in the front rank, having placed upon the market in co-operation with Ottomar Anschütz that classical instrument for instantaneous photography, the Goerz-Anschütz hand-camera. As soon as it became evident that the Goerz lenses and cameras were filling a long-felt want, there were attempts to imitate the designs, which can be considered a high endorsement of the merits of these constructions.

But the firm has distinguished itself in other lines beside photography. In 1896 it introduced a new type of field-glass known as the TRIEDER BINOCULAR. Up to that time two distinct types of field-glasses were in general use: the Galilean field- and opera-glass with its annoyingly narrow field of view, and the Kepler type, which latter had a much larger field but on account of its optical construction was long and unwieldy. The Goerz Trieder Binocular combines the compact construction of the one with the wide field and fine optical qualities of the other.

Owing to the greatly-increased production of the firm, it became necessary to erect a large modern factory, and since 1898 the firm has occupied at Friedenau, near Berlin, its own factory, the buildings of which cover 5,100 square meters. Branch factories have been established at Winterstein, in Thuringia, Vienna, Pressburg and St. Petersburg.

The products of the C. P. Goerz factory in Berlin were first introduced in America during the World's Fair at Chicago, in 1890, and ever since the firm has had offices and salesrooms in New York City. To supply the growing demand of Goerz products in the United States, Mr. C. P. Goerz decided in the year 1899 to establish in New York a branch factory, and in 1906 it was deemed advisable to organize an American company which is the present C. P. Goerz American Optical Company, with spacious and well-equipped premises, at 317 East 34th Street, where is maintained the same degree of conscientious skill which has made "Goerz Quality" proverbial throughout the world.

This short sketch will give the reader interested in the development of the photographic industry a general idea of the tremendous development of this well-known optical establishment, and Mr. C. P. Goerz, the founder and present active head, may well look back with pride and satisfaction upon the twenty-five years of his activity and success as a manufacturer of photographic and optical goods of supreme quality.

A Prize-Winning Lens

It is gratifying to learn that Mr. S. H. Lifshay, of Brooklyn, succeeded in winning the prize of \$500 offered by the Eastman Kodak Company, for the best work by a professional photographer. The negative which won this prize was made with a Cooke portrait-lens, Series VI, of 13-inch focus.

Liberal Discount on Photographic Books

THE publishers of the Library of Amateur Photography — which is advertised in this issue — desire to state that a discount of 33 1/3 per cent will be given to those persons who send in their orders for these books prior to Jan. 1, 1912.

A Prized Distinction

THE manufacturing firm of Wellington & Ward informs us that it has been awarded the Grand Prix (highest award) at the Turin International Exposition for its exhibits in Classes 15 and 16 combined, i. e., for photographic plates, papers and films, and for Artistic and Technical Photography.

WITH THE TRADE

The Verito Lens

THE newest addition to the Wollensak Family of Lenses, the Verito Diffused-Focus, F/5, seems to have filled a long-felt want of both the amateur and the professional photographer, as the reports received by the Wollensak Company from those who have been using the Verito are very flattering indeed.

The Verito is a double lens built on an entirely new formula and giving beautiful soft negatives free from ghosts and flare and distinctly different from those made with any other type of soft-focus lens upon the market to-day. It proved to be the "hit," as far as lenses were concerned, at both the National Convention at St. Paul, and the Bridgeport Convention this year, and orders were received from such well-known professional workers as Harris & Ewing and W. H. Towles, Washington, D. C., Ben Larrimer, Marion, Ind., J. H. Garo, Boston, Elias Goldensky, Philadelphia, and many others.

The Verito is equally suitable for landscape-work because of the fact that it is rectilinear and will therefore render landscapes without distortion with an absolutely equal diffusion over the entire plate. A number of the best-known workers in pictorial landscape-photography have placed orders for the Verito and no doubt many of the leading workers will become the owner of one before the end of this year.

Owing to the great demand since its introduction, it has been impossible to fill all orders promptly, but the Wollensak Company advise us that it is now prepared to ship these lenses promptly upon receipt of order.

The Verito will be found a special advantage in winter landscape-work and we urge our readers who are interested in pictorial work of any description to address the Wollensak Optical Co., Rochester, N. Y., and ask for descriptive matter pertaining to the Verito lens.

The Defender Company's Competition

THE Defender Photo Supply Company has been conducting a very successful competition among amateur photographers in the state of Minnesota. When the contest had been brought to a close, two hundred and eleven competitors had submitted prints on Argo Paper.

Eight prizes, aggregating \$75.00, were awarded, the judges being Charles R. Webster, Augustus Buckhecker and E. C. Gutland, all of Rochester. The former two are experienced photographers who have been in business for many years, and the latter is a competent photographic critic.

Prizes were awarded as follows: First Prize, \$25.00, C. R. Weldon, Minneapolis; Second Prize, \$15.00, H. N. Emerson, Minneapolis; Third Prize, \$10.00, Alta P. Wright, St. Paul, Minn.; Fourth to Eighth Prizes, \$5.00 each, respectively to Faus P. Silvernale, St. Paul; C. J. Brindmore, Elton K. Crowell, J. A. Flahavan and DeWitt Horn, Minneapolis. The judges further requested that honorable mention be given prints submitted by Olive P. Taylor, and T. M. Broderick, Minneapolis, and R. C. Lansing, St. Paul. While, under the terms of the contest, but eight prizes could be awarded, these three prints were so excellent that the contestants who submitted them are to be congratulated, along with the prize winners. Indeed, most of the prints submitted were of a high order of excellence. Amateur photography in the Twin Cities is moving on a high plane, if these prints may be taken as a criterion.

The Ensignette Camera

G. GENNERT, New York and Chicago, sends us a circular of the Ensignette camera, the product of the English firm of Houghtons Ltd. Here we have compactness carried to an extreme, for the Ensignette is only 1 7/8 x 3 7/8 x 3/4 inches when folded, and thus may be carried in a waistcoat-pocket with ease and comfort. It is built entirely of metal, pulls out on struts to a fixed focus, uses 6-exposure Ensign film-cartridges and makes a picture 1 1/2 x 2 1/4 inches. The lens on the \$10.00 model is a single meniscus, with stops F/11, F/16 and F/22, and the shutter gives time or snapshot-exposures. The efficiency of one of these short-focus small cameras must be seen to be appreciated. Suffice it to say that, with an Ensignette printing-box, postcard-size pictures may be printed from the small negatives without loss of detail and even greater enlargements are possible from good films.

The Anastigmat Ensignettes are fitted with Ensign, Cooke, Syntor and Tessar lenses at prices from \$25.00 to \$48.00 and are provided with focusing-attachment. The sales of these special models abroad have been very large, and Messrs. Gennert anticipate a great demand from PHOTO-ERA readers who desire the best in a pocket-camera and are willing to pay for an absolutely high-grade and efficient instrument which will make pictures in a bad light and thus preserve many records impossible to obtain with larger cameras—for the Ensignette can be (like the poor) "always with us."

New Catalog of Balopticons

BALOPTICONS are Bausch and Lomb lanterns for all kinds of projection, whether of lantern-slides, opaque objects, microscopic preparations, gross specimens, polarized light or spectra. The new catalog of these goods issued in October lies before us. As a reference handbook it is complete, for every possible accessory is listed and described. Like all the other Bausch and Lomb catalogs, this book is beautifully printed on the highest-grade coated paper and embellished with halftones of the highest grade. The opening chapter gives the history of projection-apparatus and defines clearly the optical systems employed for the six forms of optical projection in practical use. These forms are well illustrated by diagrams, and useful tables of reference are given. The Balopticons themselves range from the simple Model C, equipped for lantern-slides only at \$25 (but capable of being fitted with an attachment for opaque projection), to very elaborate and complete combination instruments designed for the most critical and exacting scientific work in universities. Those of our readers who are interested in projection should secure a copy of this catalog without delay, for the goods are of the well-known standard of the famous Rochester firm. PHOTO-ERA has several times commented on the dangers of cheap projection-apparatus and cheerfully recommends its readers to investigate the unquestioned merits of the Balopticons.

Boston Dealers Busy

So many subscribers have written to us of late to ask which Boston dealer could make them some enlargements promptly that we instituted an inquiry. In every case we were told that they had so much work ahead that they could not promise deliveries under two to

three weeks. When we suggested advertising the finishing-department to one dealer, he informed us that in spite of doubled capacity this season he is as far behind his orders as he was last year. But this should not discourage our readers, for it is a good indication of the fact that high-class work is turned out, the workmen taking plenty of time to get the best results.

Compounding Duratol Developers

A GENUINELY NEW developing-agent is a rarity in these days, when so many manufacturers are putting out under their own trade-names the developers on which patents have expired, such as metol and rodinal. Duratol, however, is a new substance, with some peculiar properties of its own. For instance, when some of the solution dried on a marble washstand, the color was blue, leading me to believe that the cat had broken a bottle of methylene blue kept there for microscopic work. Investigation proved the stain to be due to Duratol, as the dropping-bottle was intact. But perhaps the most remarkable peculiarity of the salt, which is benzylparamidophenol, is its tendency to crystallize out when sulphite of soda is added to a solution. Repeated attempts to prepare a developer from original formulas resulted in the formation of a crystalline precipitate. For example, 32 gr. of Duratol dissolved readily in 32 oz. of hot water. On adding 120 gr. of anhydrous sulphite of soda, I observed the formation of the characteristic crystals, which the makers state are a condensation- [addition-] product of the sulphite and the carbonate of soda. I am therefore led to believe that they are mistaken, particularly as the crystals are of entirely different morphology from any of those formed by the sodium salts on which I can get data. The addition of anhydrous carbonate to the solution mentioned above, up to 480 gr., failed to redissolve the precipitate; but heat readily effected solution, though the crystals re-formed on cooling. The clusters occupied two thirds of the volume of the fluid. Left uncorked for a month, the solution discolored very little. I then filtered it and used it for a batch of gaslight-prints with good results, the tones being a good warm black on three different papers.

The makers of Duratol advise the thorough mixing of the anhydrous sulphite with the carbonate before they are added to the solution. This is a certain means to avoid precipitation, provided the proportions as advised are not departed from, and particularly if the sulphite is not in excess. Some of their own earlier formulae called for too great a weight of sulphite. The latest folder gives two excellent recipes, one for plates and gaslight-papers, the other for Professional Cyko, neither of which will cause trouble if properly compounded in accordance with the specific directions furnished. Both work quite clearly without bromide. Later, I hope to calculate a formula for Duratol alone and will report the results.

As tests for Duratol I would suggest its behavior with sulphite and the color-reaction on evaporation.—*M. D. M.*

The New C. P. Goerz Catalog

THE new catalog of Goerz lenses, issued by the C. P. Goerz American Optical Co., 317 East 34th St., New York, is a highly creditable production. The numerous attractive illustrations attest the superb optical efficiency and wide range of usefulness of the Goerz lenses. Among the lenses listed and fully described are the justly celebrated Dagor F/6.8; Celor F/4.5 to F/5.5; Syntor F/6.8; Process Dagor F/7.7; Hypergon F/22, and Telephoto. The shutters embrace the NEXCELL Sector, the NEXCELL Stereo, the Compound and Tenax.

The cameras are the Goerz-Anschütz Folding "Ango," adaptable to regular and instantaneous exposures, high-speed work and tele-photography, also particularly constructed for use in tropical countries; Folding Reflex Camera; Manufoc-Tenax (folding hand-camera), Vest-Pocket Tenax (convertible into an enlarging-camera). There are also four styles of the well-known Goerz Binocular, although a special binocular catalog has been issued and may be had on request.

Famous German Photographic Papers

THE well-known firm of Trapp & Münch, of Friedberg, Germany, has achieved fame in the photographic world through its printing-out papers. Their employment by the leading German photographers is proof of their superior qualities, knowledge of which has reached the United States, so that the firm has deemed it advisable to establish an agency in New York City, which is in charge of W. Heuermann who has long been identified with high-class photographic specialties of German manufacture. See the advertisement in this issue.

During the many years when albumen paper was almost the sole printing medium, the German manufacturers of this commodity were in the lead. While Dresden was a great center of this important industry, Friedberg, near Frankfurt, was another, and the firm of Trapp & Münch achieved a great reputation, second to none, in the production of a brand of such superior quality that it was used the world over, large quantities being shipped to the United States, as long as the use of albumen paper continued. When the demand came for a Matt-surface paper, Trapp & Münch were among the first in Europe to make it, and the quality of its product is to-day on a par with its once famous albumen paper. The Matt-Albumen papers enjoy great popularity in Europe, and their superb qualities will soon be appreciated in this country.

This Month's Insert

THE insert intended for the October issue was published only in name, because the printed impressions were lost—a fact not discovered until too late. It is reproduced on page 301, and is open to criticism on the score of scattered interest—lack of unity. It charms, nevertheless, by its implied tranquil character and atmospheric quality. Data: October, 4 P.M.; sunlight, hazy; Eastman N. C. film; yellow color-screen; 1 1/2 seconds; Screen-Focus Kodak 4 x 5; B. & L. lens, 6-inch focus; U. S. F/128; 11 x 14 enlargement Eastman Royal Bromide paper.

PHOTOGRAPHIC EXHIBITIONS

Information for publication under this heading is solicited

<i>Society or Title</i>	<i>Date</i>	<i>Place</i>
Eighth American Photographic Salon Held under the auspices of the American Federation of Photographic Societies.	Nov. 10-26, 1911 Dec. 1-10, 1911 Dec. 15-28, 1911 Jan. 1-15, 1912	Brooklyn Inst. of Arts and Sciences. Jamestown, N. Y. Cleveland, Ohio. Carnegie Institute, Pittsburg.

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This lens is complete and ready to fit nearly all
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The **RULE** has one-eighth inch graduations and is set at a perfect right angle to the cutting-edge.

You can pay more than is asked for Ingento Trimming Boards, but you cannot get such value. **Prices from \$1.25 to \$7.00.** Ask your dealer.

BURKE & JAMES, Inc.

240-258 EAST ONTARIO STREET
CHICAGO





The St. Paul Armory

Why Is a Congress?

To all of us who were fortunate enough to participate in the sessions of the Congress of Photography at Milwaukee, further questions of intents and purposes would seem superfluous. But I have been asked to furnish the photographic press with an article relating to the Congress, and this is the way it looks to me. The Congress, composed as it is, of elected representatives from all of the minor associations, must prove a strong factor for safety. It is natural to presume that these delegates are the best available timber in the Association, and competent to analyze any proposition which may be brought before them and reach the proper conclusion.

We all know that some ill-advised motions have passed on the Convention-floor because of lack of deliberation and understanding on the part of members of the Association, and by bringing questions affecting our welfare before the Congress we may reasonably expect better results in legislation.

Now, the state associations affiliating with the Congress will receive even more benefit, for they are then an integral part of the Photographers' Association of America. Then there is the material benefit in the saving of initiation-fees, and the difference in the annual dues, all of which is explained in the Constitution.

This year, at ST. PAUL, there will be many questions of vital importance that may lead to great results brought before the Congress. In the matter of selecting meeting-places, we must realize the possibility that sufficient votes might be secured on the floor of the Convention to hold the meeting in the same part of the country indefinitely. This is surely a dangerous condition and might sometime result in the disruption of the Photographers' Association of America. For a remedy, we propose a line dividing the East from the West, photographically speaking, together with an amendment to the Constitution, providing that annual meetings shall be held alternately each side of the line.

I trust that all delegates will give this their careful consideration and come to St. Paul ready to carry the matter to a successful issue. Another question which might receive our attention is, the proposed Parcels-Post, or perhaps a special Photographic Rate. Express-Rates might be altered to our advantage; in fact, anything affecting the welfare of Photographers may be discussed and recommendations made to the Photographers' Association of America for final action. The Academy project, although it has passed from the hands of the Congress, may yet require further consideration by that body. Although the Congress of Photography is only two years old, its work has proved so effective,

and its power for good so great, that it is safe to predict wonderful achievements for the future. — *Ben Larrimer, First Vice-President P. A. of A.*



Bridgeport Convention a Record-Breaker!

WE ANNOUNCED in our last issue that the Convention of the New England Photographers' Association at Bridgeport, Conn., next September, bade fair to be a most interesting event. Now we learn that it will be a record-breaker in every way. Although Vice-President J. P. Haley, by the use of his great influence in Bridgeport, secured the use of the magnificent new armory, even this large building has already proved too small, so great has been the demand for exhibition-space by manufacturers. The officers have acted promptly to meet the emergency. At a meeting held at Bridgeport late in May it was decided to transfer the site to Steeple-Chase Island. The Island is reached by boat from a wharf within sight of the railway station and will prove a delightfully cool as well as a most commodious situation. One of the largest buildings will be set apart particularly for the display of members' work, which will need all the space available in the hall, which is 59 x 140 ft. The business-sessions will be held in the theater, also demonstrations; and the manufacturers' displays will be cared for in the many other convenient buildings of Bridgeport's "Coney Island."



The convention of the N. E. Association, at Bridgeport, Conn., this year, will be full of pleasant surprises. Some of these have already been revealed. One of the latest is the button to be worn by members at the convention. Without exception this button excels any we have ever seen issued for any photographic event, as regards novelty and beauty of design, which is due chiefly to the apparently cabalistic characters in the center of the emblem—the name of the president, expressed in Arabic.

The buttons issued for active members correspond in design to the illustration which was published in PHOTO-ERA last month—a field in red enamel, containing gold characters in Arabic, encircled by a gold band bearing in relief the initials of the Association and the year and place of meeting. This button is to be worn by active members.

Dealers and associate members will wear a button of the same design, except the border is in black enamel with gold letters showing through, the central field and the Arabic characters being in gold.

Ladies will wear the same design in the form of a brooch, but *all gold*. This, perhaps, is significant.

WITH THE TRADE

The Wollensak Skyshade Shutter

LANDSCAPE-PHOTOGRAPHERS who prefer to secure clouds on the same plate with the foreground must have been troubled, at times, as we have been, to select apparatus which will do the work when the contrast between the bright sky and the dark nearer planes is excessive. The use of a double-coated ortho. plate with a deep-colored ray-filter, to be sure, is sometimes successful; but in most cases some method of exposing the sky less than the foreground is necessary. The Wollensak Skyshade Shutter solves the problem of equalizing the illumination, even with plain plates, for it is provided with a single leaf which rises from the bottom, thus giving the sky about $\frac{1}{2}$ the exposure of the foreground. Speeds from 1 second to $\frac{1}{100}$ are provided on the "instantaneous" marking, as well as "bulb" and "time." The back of the shutter is provided with an ingenious clamp for fastening the shutter to the lens-mount, so that the instrument does not in any way interfere with the use of a between-the-lens shutter on the same objective. The shutter is elegantly put up in a neat leather-covered case for protection from injury when not in use. We have been using one with a great deal of satisfaction, as it gives printable clouds on common plates and hence does away with bald-headed skies.

H. Oliver Bodine

HAVING severed his connection with The Photo-Crafts Shops of Racine, Mr. H. Oliver Bodine has accepted a position as Director of Publicity and Trade-Promotion for the Wollensak Optical Company, Rochester, New York. We congratulate the Rochester firm on the acquisition of so bright and hustling a business-man as Mr. Bodine. During the two years that he was manager of the Shops he built up a large mail-order trade all over the country by skilful advertising, making many warm personal friends who sent him work because of the care and skill which he puts into all that he does. Recently, when he was in Boston, we had the pleasure of a chat in which he informed us that PHOTO-ERA has been a potent factor in the success of The Photo-Crafts Shops. In his new environment Mr. Bodine will undoubtedly accomplish great things, for the Wollensak Optical Company has a splendid line of high-class goods and has "not yet begun to fight," as Paul Jones said when the Captain of the *Serapis* called on him to surrender. Our readers are advised to turn to the March issue and follow their advertisements from the beginning.

A Darkroom for Travelers

WE had the pleasure recently to spend a week-end at the seashore in a neighboring state, and, having been there before and knowing that no darkroom—not even a closet—was available, we bought an Ingento Changing Bag, made by Burke and James. It was indeed a delightful experience to sit on the cool, breezy porch, chatting with the ladies, while we unloaded the exposed plates, packed them into plate-boxes and reloaded for the next batch of pictures. The bag is so simple and easy to use that we wonder we did not buy it before. Those who use the tank—for example, the Ingento Series C—can readily load it in the bag and put the light-tight inner tank into the outer tank containing the developer in daylight. Thus this ingenious changing-bag confers on the user of plates all the benefits usually associated with the use of roll-films.

The Pancratic Telephoto Lens

WITH the opening of the outdoor-season, many amateurs who go to the seashore or to the mountains will find themselves handicapped by lack of a long-focus outfit. For such there is a cheap and easy solution of the problem of getting a large image of distant objects without buying a larger camera. We refer to the Pancratic Telephoto Lens, made by the Gundlach-Manhattan Optical Company and advertised in this issue. This objective is a complete photographic lens which screws into the regular shutter in place of the cells of the rapid rectilinear regularly supplied and gives from 3 to 8 diameters' magnification, depending on the bellows-length of the camera. For example, a Korona III, with eight-inch draw, allows a 3x magnification with a light-circle of $5\frac{1}{2}$ ". For 8x, a 23" bellows is required. An interesting illustrated circular will be sent free to our readers on application.

The Korona cameras, by the way, should be investigated by workers contemplating the purchase of new apparatus. We have ourselves just bought a Series III Korona and fitted a 6" anastigmat to it for hand-camera work on days when the heavy and cumbersome view-box must be left at home. Such an instrument, equipped with a Turner-Reich anastigmat, makes an ideal outfit for general work, as it possesses all the adjustments necessary for the making of perfect pictures.

George G. Cross

HAVING conducted the photo-finishing department of the Robey-French Company of Boston with great success for several years, Mr. Cross has accepted a position with George Murphy, Inc., 57 East 9th Street, New York City. A Connecticut Yankee, and possessed of all the ingenuity usually accompanying birth in the Nutmeg State, Mr. Cross has invented many labor-saving devices which have been widely copied by large establishments throughout the country. The unusually high standard of excellence maintained by his department has made the reputation of Robey-French for photo-finishing one of the best in the country. We congratulate Mr. Cross on his advancement and George Murphy, Inc. on having obtained his services.

Two Imperial Booklets

WE have received an advance-copy of *The Imperial Handbook* and one on *Faults in Negatives* from G. Genert, New York and Chicago, the American Agent for The Imperial Dryplate Company. The first-named contains helpful articles on many topics of interest to every photographic worker, chief of which is a remarkably well illustrated article on "Varying the Exposure According to the Subject." The classification of subjects is particularly full and precise, and the pictures make clear the various divisions so that users of the Imperial Exposure-Calculator should have no difficulty to determine just how to treat any scene presenting itself before their lenses. There are other helpful papers and a complete list of the Imperial manufacturers, with formulae for developers, including the famous "Imperial Standard" pyro-metol.

The other booklet explains in great detail the causes of defects in negatives and tells precisely how to avoid them in future. The cuts are reproductions of faulty negatives, the full series providing perhaps the best object-lesson for the beginner which we have ever seen



Learn Photography, Photo-Engraving or 3-Color Work

Photographers and Engravers Earn \$20 to \$50 Per Week
Only College in the world where these paying professions are
taught successfully. Established 17 years. Endorsed by International
Association of Photo-Engravers and Photographers' Association
of Illinois. Terms easy; living inexpensive. Graduates
assisted in securing good positions. Write for catalog, and
specify course in which you are interested.
Illinois College of Photography or 910 Wabash Av.
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L. H. BISSELL, Pres.

WRIGHT — RACINE WIS.

PRINTS REAL PHOTO-POSTCARDS
from negatives (glass or film) FOR AMATEURS at the
following prices:

1000 Cards from one negative,	\$10.00
500 " " " "	6.25
200 " " " "	3.00
100 " " " "	2.00
1000 Cards from 10 negatives,	\$12.50
500 " " " 10	9.25
Etc. " Etc. Etc. Etc.	

Send for complete price-list. We use the very best
Cyko card and absolutely guarantee our work.

Negatives titled free.

Send us 25 cents for our big 300-page catalog, and 25c
credit-certificate good with first order.

WRIGHT {PHOTO-SUPPLIES } Racine
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SQUARE DEAL

They all get it at

WILLOUGHBY'S

Every customer a walking
advertisement

Send Stamp for Bargain-List

WILLOUGHBY & A SQUARE DEAL

814 Broadway, New York

For Sale — A Money-Maker at a Bargain

First-class Photo-supply store, also commercial photograph-
advertising-framing- and finishing-business, wholesale and
retail, at main entrance of Chicago's largest park. Now
doing big business; can be doubled. Net receipts last year,
\$6,200.00. Owner has other business-interests. Price \$1,250.00;
part cash. Address Studio, 1550 E. 63rd St., Chicago, Ill.

Higgins'

Are the Finest and Best Inks
and Adhesives



Drawing Inks
External Writing Ink
Engrossing Ink
Taurine Mucilage
Photo-Mounter Paste
Drawing-Board Paste
Liquid Paste
Office Paste
Vegetable Glue, Etc.
Emancipate yourself from the use of corrosive and
ill-smelling inks and adhesives and adopt the Hig-
gins' Inks and Adhesives. They will be a revela-
tion to you, they are so sweet, clean and well put
up, and withal so efficient.

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CHAS. M. HIGGINS & CO.
Manufacturers

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Branches: Chicago, London

GOERZ LENSES & CAMERAS

High-grade Euro-
pean and Ameri-
can outfits a
specialty.

Lenses and Cameras exchanged.
Ask for up-to-date bargain-list.
*I invite correspondence on anything
photographic.*
My name in the photo-world is my guaranty.

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PHOTO-SUPPLIES
NEW YORK CITY.

Photographers Should Not Fail to Visit

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545 Washington St., Boston, U. S. A.

B. F. KEITH, Proprietor

Open from 9 a.m. to 10.30 p.m.

9 a.m. to 1.30 p.m., 10 cts.; 1.30 p.m. to 10.30 p.m., 20 cts.

JOSEPHINE CLEMENT, Manager

High-class motion-pictures and stereopticon views relating
to current events and matters of local interest. Excellent
music, vocal and instrumental. A permanent stock-company
will produce a one-act play as part of the program.

Change of bill weekly



WE BUY, SELL AND EXCHANGE

Second-hand Cameras and Lenses.
Carry a full line of latest Kodaks, Cen-
tury, Premo and Graflex; also supplies.

Send for Bargain-list

GLOECKNER & NEWBY
171 Broadway, New York City

SECOND-HAND LENSES ALL MAKES AND SIZES

Work just as well as new ones. Send for our bargain-list

St. Louis-Hyatt Photo-Supply Co.

St. Louis, Missouri

The Right Kind of a SHUTTER

DOES ITS WORK SMOOTHLY, AND DOES IT EVERY
TIME. The right kind of a shutter is an insurance against
annoyance and delay. A shutter that has the endorsement
of years of usage by thousands of the best photographers is
pretty certain to be about the best obtainable. Such a one is
the

PACKARD-IDEAL

It is made in all sizes and styles for time and instantaneous
exposures, and each one is sold under an ABSOLUTE GUAR-
ANTY. Write for a booklet describing the various styles.
All dealers carry them, and remember, they are manufac-
tured only by

MICHIGAN PHOTO-SHUTTER CO.

206 East Water Street, KALAMAZOO, MICHIGAN

When Ordering Goods Remember the PHOTO-ERA Guaranty

CLASSIFIED ADVERTISING

Thirty Cents per Agate Line. Minimum Four Lines. MONEY MUST ACCOMPANY ALL ORDERS. Forms Close the Fifth of Each Month Preceding the Date of Issue

PHOTO-ERA, 383 BOYLSTON STREET, BOSTON

FOR SALE

THE WELLCOME PHOTOGRAPHIC EXPOSURE-RECORD AND DIARY, 1911. A complete manual of all printing-processes, developing, intensifying, reducing, etc. Full and extremely helpful treatise on exposure in all conditions, including photography at night, interiors, copying and enlarging. The exposure-calculator makes failure impossible. Sent postpaid for 50 cents. PHOTO-ERA, 383 Boylston St., Boston, Mass.

PHOTOGRAPHS AND LANTERN SLIDES COLORED by Edward T. Reeves, 41 West Newton Street, Boston. Sample 4 x 5 on gelatin paper, or slide, colored 25 cents. Highest-class work, endorsed by PHOTO-ERA. Maker of Reeves's Economical Photo-Colors, best and cheapest, \$1.00 per set of 12 with full directions.

A NEW ELECTRIC RADIOPTICAN FOR THE SMALL LECTURE-HALL or school-room, fitted with fine lenses and powerful incandescent lamps, capable of showing clear, effective seven-foot pictures from postcards and photographs. Price \$25.00; other 1912 models, \$2.50 to \$40.00. Write for interesting booklet of Radiopticans and stereopticons. J. H. PEESCOFT, Providence, R. I.

FOR SALE—Brand-new 5 x 7 Century Camera with case; Series III Cooke Lens, Compound Shutter, Crown Tripod, six plate-holders, very cheap. GEO. C. WEIR, Wheeler Building, Columbus, Ohio.

GOOD ONLY UNTIL SEPT. 1. One year's subscription to PHOTO-ERA with Klary's "Portrait-Lighting" and "Why My Photographs Are Bad"—regular net-price \$3.00, for \$2.00, cash with order. Address PHOTO-ERA.

FOR SALE

FOR SALE—A 4 x 5 Revolving-Back Auto Graflex without lens, regular price, \$125.00, for \$89.00. Fitted for plates and film-pack. Like new. WM. F. UHLMAN, Photo-Supplies, St. Joseph, Mo.

STEREOSCOPIC PICTURES with any camera. We have a few stereo-simplex attachments to screw on tripod head to allow changing position of camera. Price \$2.00. Sent on receipt of \$1.00; with PHOTO-ERA one year, \$2.00. Address PHOTO-ERA.

An 8 x 10 Seneca View-Outfit, complete with lens, tripod, and carrying-case. Good as new—used a few times. \$30.00 buys it. Address, W. E. ROGERS, Milton, Wis.

PERSONAL

INFORMATION WANTED—Will the photographer who made a negative of a little girl on Boston Common March 21 and gave parents a Sunday Post Magazine kindly communicate at once with T. M. H., care PHOTO-ERA?

YOU CAN MAKE your "hobby" pay you a profit instead of being an expense, if you will give a small part of your spare time to a business in which we will start you. You have the negatives, or can make them, which will be the foundation for a permanent and profitable business for you under our new plan. Exclusive offer made to first ones replying from each town. Write to-day for particulars. Mulpint Photographic Co., 505 7th Ave. So., Minneapolis, Minn.

SENECA CAMERAS

have won the first prize in **Photo-Era Contests**
for the past three months

Isn't this a reason for

PHOTO-ERA READERS

to use Seneca Cameras?

For a better acquaintance with the Seneca family write for

1911 76-PAGE ILLUSTRATED CATALOG

SENECA CAMERA MFG. CO.

Dept. G.

Rochester, N. Y.

Largest Independent Camera-Makers in the World

in print. Our readers, even the most advanced, will find in these two books material which will prove helpful, so we advise them to send at once for copies, addressing the nearer office.

Pictures of Game and of Children Wanted

THE Bausch & Lomb Optical Company desires to secure pictures of game and also child-studies in the home, made with Tessar or Protar Lenses. Anyone having negatives of interest in these lines will do well to communicate with the Company, addressing Department R and mentioning PHOTO-ERA.

The Watkins Time-Developer

At our request, Mr. E. H. Washburn of The Boston Camera Club tested the Watkins Time-Developer. He has submitted negatives and prints which demonstrate that the method is quite reliable and particularly fitted to the needs of the beginner, who often has great difficulty to determine just when to stop development. The plan of using a calculator for different temperatures in combination with a classification of development-speeds of plates and films reduces the matter to a certainty and ensures very good average results.

The Bissell Colleges

MR. LEROY KELLOGG, a student in 1905, has just been elected Secretary of the Inter-Mountain Photographers' Association of Colorado, Utah, Nevada and Idaho. His exhibit at their recent convention was the one selected to be sent to the National Convention at St. Paul in July.

PRES. L. H. BISSELL has just added to his garage a very fine high-power touring-car for road-work and also for meeting students at trains. He and Mrs. Bissell have decided to make the trip to St. Paul in it to attend the National Photographers' Convention in July.

Prints for Coloring

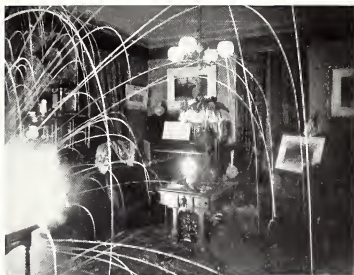
In coloring photographs with transparent colors much disappointment is caused by using too absorbent a paper. The color sinks into the paper and helps to lose the detail. A heavy paper with rough finish well coated with emulsion gives a fine result. A smooth, shiny surface is likely to be too showy. Selection of subject as well as of printing-paper has a great deal to do with the result. Prints must not be too dark. Our readers should bear these remarks in mind when sending prints to be colored to Mr. Reeves, whom we recommend and whose advertisement will be found in our Classified Department.

High-Class Spirit-Levels

THE TAYLOR-HOBSON COMPANY, importers of Cooke Lenses, remind us that they have a special circular on the T. T. and H. spirit-levels. They are distinguished by the same superior workmanship and finish which make the Cooke Lenses the most beautiful on the market. We owned one for over seven years before it ran dry and have just replaced it with a new one. The circular will be sent free to readers mentioning PHOTO-ERA on application to the Taylor-Hobson Co., 1135 Broadway, New York City.

Photo-Era's Advertising-Value

A BOSTON DEALER who has hitherto marketed his specialty on a small scale, without advertising, has recently taken space in our pages. When asked whether he would repeat, he replied, "Yes; but I shall have to increase my manufacturing-facilities. My ad. has brought in so many orders that I am having all I can do to put the goods properly through the shop."



A Flashlight Accident

FLASHLIGHT-PHOTOGRAPHY is not always untended with danger, as the picture given above proves. The incident happened many years ago to a friend of the editor's and was the result of attempting to use in a closed or "blow-through" lamp one of the earliest of the explosive flash-compounds. Luckily, the operator escaped with minor injuries and the loss of his camera, although the plate in the holder was not harmed.

Great improvements have been made in recent years, so that now the amateur may confidently use such excellent products as the Agfa Flashlamp and Blitzlicht Powder with no element of danger, provided ordinary care is used. The Spred-Lite Lamp is another excellent form which is quite safe when used with any of the standard flash-powders. For absolute safety, probably no device surpasses the Eastman Flash-Sheets, whenever a "time" flash is desirable.

The Sylvar Lens

HIGH quality at a low price is the most fitting way to describe the Sylvar Lens. It is made in all sizes and can also be had in sets of cells to fit any of the standard shutters furnished with the general line of hand-cameras. It is an anastigmat lens with the highest degree of efficiency, working at F/6.8. It is also fitted to the popular Compound Shutter, efficient up to $\frac{1}{250}$ second, forming the chief feature of the Sylvar Camera—compact, light and "taking." Ask your dealer, or write to G. Gennert, 24-26 E. 13th St., New York City, or 16-20 State St., Chicago, Ill., for a ten-days' free trial and see the wonderful improvement in your pictures.

Another Impostor

THE police of the Fiftieth Street station in Chicago are hunting for a man representing himself as being a solicitor for a photographic concern. His plan was to collect \$5 from his victims, leaving coupons "good for a dozen pictures" if presented at the studio within the next week. But there is no such studio. — *Abel's Photographic Weekly*.

Richard W. Sears

"DICK" SEARS, the popular newspaper-photographer of Boston, has lately entered the lecture-field, and has given talks on newspaper-photography before various clubs and societies. On one occasion he took his last photograph, a flashlight in the Cambridge subway, at 4.45 and showed it as a lantern-slide at 8 P.M. Sears was also elected vice-president of the newly-formed association of the Boston newspaper-photographers.

A Note on Sending Prints Safely

THAT our readers may not think us captious critics, we reprint below the note which has for some months been used on the Competitions Page, together with a picture illustrating the need of the caution given. The picture represents the condition in which Mr. Dundas Todd's magnificent telephotograph of Mount Baker reached the editor. This print was the second sent to us—both being ruined because the corrugated-board from which the mailing-device was made consists of a single thickness of soft and flabby texture. We were thus unable to present this highly-successful effort to our readers. It is doubtful whether any really safe photo-mailing device has yet been placed on the market, so we advise our contributors to give all the present devices a wide berth and to follow closely the directions here reproduced.

It is strange that workers sending us prints persist in enclosing them between sheets of cardboard with the corrugations running in one direction. Photographs sent thus, or placed against one single sheet, very seldom reach their destination safely. *Prints should first be wrapped in soft paper, and then placed between two pieces of cellular board—the kind which is covered on both sides—with the corrugations running in opposite directions.*



Advertising-Enterprise

ALTHOUGH every department of Photo-ERA is read with consuming interest by practitioners and advertisers alike, no section is more carefully read by all than "Our Illustrations." It conveys information of general importance, being conducted with conscientious care and absolute fairness. No technical information whatever is suppressed. To what extent this department is read and

appreciated by manufacturers of lenses and apparatus is shown by the advertisement, in this issue, of the Seneca Camera Mfg. Co. It invites perusal.

Novel Advertising-Tape

ONE of the most attractive novelties in the advertising-field which has come to our notice is the neat printed tape for tying up packages, produced by Neuer and Hoffmann, whose advertisement appears in this issue. It comes in a wide variety of colors in a uniform width of $\frac{3}{16}$ inch and is extremely strong. The value of this material to the progressive photographer should be apparent at a glance. Not only will it give a certain distinction to everything he sends out, but also be preserved and used again by the recipient. An inexpensive method of building up trade would be to furnish tape with the imprint of the studio to local tradesmen, such as stationers, photo-supply dealers and apothecaries. We have noted, in the case of several business-houses with whom we have dealings, that this tape is always read and favorably commented on by the customer and have also observed that it is saved for future use where ordinary twine would be cut and thrown away. We advise shrewd business-men in the photographic field to be the first in their territory to take advantage of this clever device.

Exhibition by Clarissa Hovey

ONE of Boston's most successful photographers is Clarissa Hovey, with a studio at 394 Boylston Street, who has gained a high reputation in studio- as well as home-portraiture, and has also done some capital landscape-work. With this as an admirable preparation she has tried her skill in color-photography, having achieved uncommon success with Lumière Autochrome plates. These, to the number of seventy-five, she exhibited at her studio during the month of June. The collection included portraits, flowers, landscapes, shady lanes, country-homes, flower-gardens, al fresco groups of children and views of private grounds and estates in the vicinity of Boston. In all these Miss Hovey displayed her mastery of the Lumière color-process, expressing by its means, and with a high degree of truthfulness, the full range of Nature's coloring and the various nuances of atmosphere. None of her autochromes showed the results, so commonly seen in the work of others, of improper exposure and unskilful chemical manipulation. The collection was seen and admired by members of the craft, connoisseurs and artists, and greatly enhanced Miss Hovey's reputation as a photographic specialist.

Keeping-Quality of Ensign Films

A CUSTOMER sent to G. Gemert under date of May 30 a picture taken on an Ensign Film purchased in the spring of 1909 and marked to expire August, 1909. Although exposed in May, 1911, when the film was 2 years and 9 months old, and 1 year and 9 months after the guaranty had expired, the entire roll gave perfect results. The extreme speed and excellent orthochromatic quality of Ensign Films added to their indisputable keeping-quality, make them most desirable films for the explorer or the traveler who must have an ample supply of films but may not use them up immediately.

Do Not Overlook This!

UNDER the heading of "Personal," we print this month a Classified Ad. which we hope will be noticed by the photographer in question. The advertiser has interviewed most of the newspaper-photographers without results, and, as the little girl has lately died, is anxious to hear from the camerist.

For Portraiture

ARTEX

PAPERS

MADE IN COLUMBUS



SAMPLES, PRICES AND
GENERAL INFORMATION
MAILED UPON REQUEST

THE ARTEX PHOTO PAPER ©
COLUMBUS, OHIO

Terry Co. & Co.

When Ordering Goods Remember the PHOTO-ERA Guaranty

THE BEST



FILM

ALL DEALERS

G. GENNERT

24-26 E. 13th St.
New York

16-20 State St.
Chicago

ANNOUNCEMENT

The New Hotel
THE SAINT PAUL
will be the Headquarters for
the Photographers during
their Convention in July, 1911

Those desiring to stop at Headquarters
are urged to reserve space early, as
we will not overcrowd the Hotel.

Every room in this Hotel has a bath,
and the restaurant on the roof will
make an agreeable diversion during the
heated spell.

ASK FOR BOOKLET

CHARLES G. ROTH
RESIDENT MANAGER

DISTINCTIVE PRINTING

is an essential characteristic of
all effective stationery, booklets
and catalogs. It brings results
where inferior work passes un-
noticed or condemned. Photo-
graphers are engaged in art work
and their printed matter should
also be artistic.

THE BARTA PRESS

Boston

Printers of Photo-Era



GRAFLEX

The GRAFLEX shows the image right side up—
the size it will appear in the negative—
up to the instant of exposure.

It is not necessary to guess the distance between the camera and subject. Focusing scale and "finder" are done away with; there is no uncertainty as to what will appear in the negative.

The GRAFLEX is fitted with the GRAFLEX FOCAL PLANE SHUTTER, giving exposures of any duration from "time" to 1-1000 of a second.

*With a Graflex you can make snap shots on dark days,
in the deep woods, or even indoors.*

Roll Film. Plates
or Film Packs may be
used with the GRAFLEX.

Get Catalog free at your dealer's, or
FOLMER & SCHWING DIVISION
Eastman Kodak Co., ROCHESTER, N. Y.



WHY WORK IN A CLOSE, STUFFY DARKROOM?

A darkroom is to be avoided at any time, how much more so during these torrid days.

An Ingento Changing-Bag and an Ingento Style C Tank

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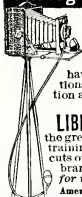


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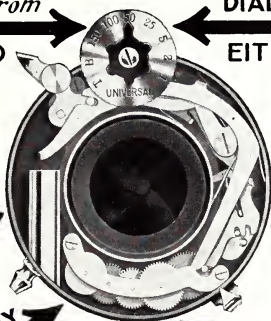
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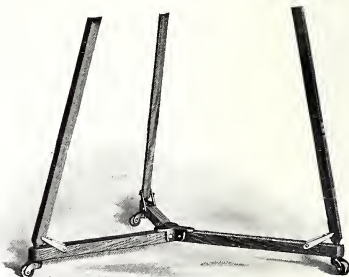
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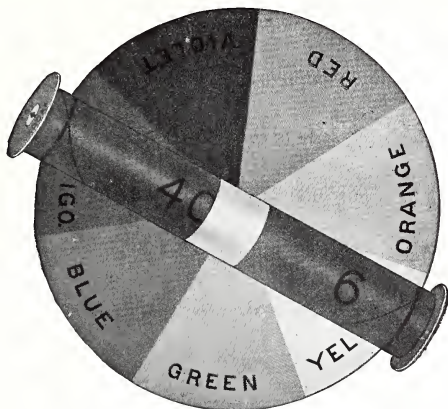
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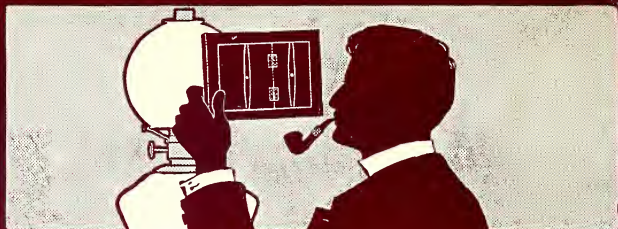
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